

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 10-K

### ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 1989

Commission file number 1-8491.

# HECLA MINING COMPANY

(Exact name of registrant as specified in its charter)

#### Delaware

(State or other jurisdiction of  
incorporation or organization)

6500 Mineral Drive  
Box C-8000

Coeur d'Alene, Idaho

(Address of principal executive offices)

82-0126240

(I.R.S. Employer  
Identification No.)

83814-1931

(Zip Code)

(208) 769-4100

(Registrant's telephone number,  
including area code)

#### Securities registered pursuant to Section 12 (b) of the Act:

Title of each class	Name of each exchange on which each class is registered
Common stock, par value 25¢ per share	
Liquid Yield Option Notes Due 2004	New York Stock Exchange
Preferred Share Purchase Rights	Pacific Stock Exchange

#### Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months, and (2) has been subject to such filing requirements for at least the past 90 days. Yes ☒ No ☐

The aggregate market value of the registrant's voting common stock held by non-affiliates was \$401,756,212 as of February 28, 1990. There were 27,008,821 shares of the registrant's common stock outstanding as of February 28, 1990.

Documents incorporated by reference herein:

Proxy Statement dated March 21, 1990 for the Annual Meeting of Shareholders, which has been filed with the Commission pursuant to Regulation 14A. See Parts I and III.

## PART I

### Item 1. Business

#### GENERAL

Hecla Mining Company (the Company) is a diversified mining company, principally engaged, directly and through subsidiaries, in the mining and processing of silver, gold and other nonferrous metals, including lead and zinc, with interests in ball clay, kaolin, volcanic rock products, uranium and certain other minerals. The Company is also engaged in the exploration and development of mineral properties, primarily in search of precious metals, both on its own behalf and through joint ventures. Its principal assets and sources of revenues are its mining operations in the Coeur d'Alene District in northern Idaho, the Knob Hill mine near Republic, Washington, a 28% interest in the Greens Creek mine located near Juneau, Alaska, its ball clay operations in Kentucky, Tennessee and Mississippi, its kaolin operations in South Carolina and Georgia, its volcanic rock products operations in southern Colorado and northern New Mexico, and germanium and gallium operations near St. George, Utah which was brought into production in early 1990. The locations of the principal properties are shown on page 24 of this report. The Company's revenues and profitability are strongly influenced by the world prices of silver and gold and, to a lesser extent, lead and zinc. Metal prices fluctuate widely and are affected by numerous factors beyond the Company's control, including inflation and worldwide forces of supply and demand. The aggregate effect of these factors is impossible to predict.

The principal executive offices of the Company are located at 6500 Mineral Drive, Box C-8000, Coeur d'Alene, Idaho 83814-1931, and the telephone number at that location is (208) 769-4100.

Sales of metal concentrates and products are made principally to custom smelters and commodity dealers. The percentage of revenue contributed by each class of product is reflected in the following table:

Product	Years		
	1989	1988	1987
Gold	28.3%	42.4%	38.2%
Silver	24.1	27.0	33.3
Lead	8.2	5.2	2.3
Ball Clay and Kaolin	27.9	18.2	19.9
Scoria	5.6	5.8	5.8
All others	5.9	1.4	0.5

The mineral reserves in the following property discussions are defined as follows:

The Proven and Probable Mineral Reserves stated in this report are reserves that reflect estimates of the quantities and grades of mineralized material at the Company's mines which the Company believes can be recovered and sold at prices in excess of the cash cost of production. The estimates are based largely on current costs and on projected prices and demand for the Company's products. Mineral reserves are stated separately for each of the Company's mines based upon factors relevant to each mine. Mineral reserves for the Coeur, Galena and Greens Creek mines are based on calculations of reserves provided to the Company by the operator that have been reviewed but not independently confirmed by the Company.



Changes in Reserves represent general indicators of the results of efforts to develop additional reserves as existing reserves are depleted through production. Grades of ore fed to process may be different from stated reserve grades because of variation in grades in areas mined from time to time, mining dilution and other factors. Reserves should not be interpreted as assurances of mine life or of the profitability of current or future operations.

"Proven Reserves" are resources for which tonnage is computed from dimensions revealed in workings and drill holes and for which the grade is computed from the results of detailed sampling. The sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape and mineral content are all established. The computed tonnage and grade are judged to be accurate, within limits which are stated, and no such limit is judged to be different from the computed tonnage or grade by more than 20%.

"Probable Reserves" are resources for which tonnage and grade are computed primarily from specific measurements, samples or production data, and partly from projection for a reasonable distance on geologic evidence. The sites available for inspection, measurement and sampling are too widely or otherwise inappropriately spaced to permit the mineral bodies to be outlined completely, or the grade established throughout.

"Reserves" are that part of a mineral deposit that can be economically and legally extracted or produced at the time of the reserve determination. Reserves are customarily stated in terms of "ore" when dealing with metalliferous minerals. "Ore" means material that can be mined and processed at a positive cash flow. The Company's estimates of Proven Reserves and Probable Reserves at December 31, 1989 are based on a gold price of \$360 per ounce and a silver price of \$5.50 per ounce. Reserves in earlier years were based on the Company's prior projections for gold and silver prices.

#### METALS SEGMENT

##### Republic Unit - Republic, Washington

The Company owns and operates the Knob Hill mine located near Republic, Washington, which consists of mining properties, a concentrator and ancillary surface plants. The mine produces gold-silver ore which is milled on the property. Products of the mill are a gold-silver flotation concentrate and a gold-silver dore' metal product.

The Knob Hill mine is an underground operation using conventional underground mining methods. The coarser portions of mill tailings are pumped back into the mine to backfill mined-out areas. The ore from the mine is processed in a 270-ton-per-day flotation and cyanidation mill. Combined average recovery for 1989 in the two mill products (flotation concentrate and dore' metal) amounted to 94% of the gold and 90% of the silver contained in the crude ore. Adequate provision has been made for disposal of mine waste and mill tailings in a manner which complies with current federal and state environmental requirements.

The mineral-bearing structures in the Knob Hill mine are quartz fillings in fissure veins. The principal ore minerals are electrum and native gold and silver with a variety of sulfosalts and selenides. The enclosing wall rock is andesite of the San Poil formation. The mine has been developed on 13 levels from the surface to a vertical depth of 1,750 feet. Development work since 1984 has opened up the Golden Promise area consisting of several veins. The work performed to date indicates that the Golden Promise area is typified by numerous faults which, in part, postdate the ore-grade mineralization and complicate the task of developing ore reserves.

Flotation concentrates produced from the Company's Republic mill are smelted by ASARCO Incorporated at East Helena, Montana. The silver contained in the concentrates is sold directly to ASARCO. The dore' metal product is shipped to Johnson Matthey's refinery at Salt Lake City, Utah for further refining. The gold contained in the concentrate and the gold and silver contained in the dore' are then sold by the Company to metal brokers, currently Prudential-Bache Metals Company, Inc., Shearson-Lehman Hutton and J. Aron and Company primarily under short-term contracts. Pricing of silver and gold is based on the New York Commodity Exchange prices.

If ASARCO or Johnson Matthey should be unable to receive or process the products, the Company believes that other purchasers or processors for the product could be found and that profitability would not be materially adversely affected.

Information with respect to production and Proven and Probable Mineral Reserves for the past five years is set forth in the table below:

Production (100%)	Years				
	1989	1988	1987	1986	1985
Ore milled (tons)	82,961	79,210	72,491	58,681	60,551
Gold (Au) (ounces)	74,335	80,301	70,095	39,866	39,192
Silver (Ag) (ounces)	301,432	354,077	341,272	134,412	101,521

Proven and Probable  
Mineral Reserves

Total tons	412,300	526,700	514,800	372,000	96,300
Gold (oz. per ton)	0.81	0.86	0.80	1.00	0.61
Silver (oz. per ton)	3.3	4.0	3.6	4.5	2.6

The following table sets forth additional information with respect to the Proven and Probable Reserves as of December 31, 1989 at the Knob Hill mine. The reserve calculations utilized a cutoff of 4.0 feet of mining width at .25 ounce per ton gold.



Mineral Reserves on December 31, 1989

	<u>Tons</u>	<u>Avg Grade Au Ozs/Ton</u>	<u>Avg Grade Ag Ozs/Ton</u>	<u>Oz Au</u>	<u>Oz Ag</u>
Total Proven	252,770	.95	3.91	240,103	987,649
Total Probable	<u>159,554</u>	<u>.60</u>	<u>2.41</u>	<u>95,098</u>	<u>384,217</u>
Total Proven & Probable*	<u>412,324</u>	<u>.81</u>	<u>3.33</u>	<u>335,201</u>	<u>1,371,866</u>

\*Reserves represent diluted in place grades and do not reflect losses in the recovery processes. Dilution was effected through application of 1.0 feet on either side of the vein for any sample thicker than 2.1 feet. For samples thinner than 2.1 feet, dilution was effected with whatever thickness was necessary to equal 4.0 feet. Diluent grades are zero ounces per ton for both gold and silver.

In addition to its Proven and Probable mineral reserves, the Company has identified significant Mineral-Bearing Material in areas of the mine which are accessible from present underground workings. This additional Mineral-Bearing Material includes 764,000 tons averaging 0.33 ounce per ton of gold and 1.58 ounces per ton of silver. Mineral-Bearing Material means material for which quantitative estimates are based on drill hole samples too few in number to allow for classification as probable reserves. The estimates rely on a combination of drill hole samples and assumed continuity or repetition of which there is geologic evidence similar to deposits elsewhere in the mine. There can be no assurance that the additional Mineral-Bearing Material can be economically recovered. The Company believes the Republic property may hold potential for additional lower-grade bulk tonnage mineralization.

The Company plans to spend approximately \$6.6 million on a development program during 1990. The program includes driving a decline ramp and development drift 6500 feet into the Golden Promise area of the underground mine. The decline will access additional areas of the mine and should allow the Company to convert known Mineral-Bearing Material into the Proven and Probable Mineral Reserve category as well as providing a more efficient route to develop existing underground Mineral Reserves.

Approximately 124 people are employed at the Republic Unit. Employees at Republic are not represented by a bargaining agent.

Lucky Friday Unit - Coeur d'Alene Mining District - Idaho

The Company owns and operates the Lucky Friday mine, which is located about one mile east of Mullan, Idaho in the eastern part of what is known as the Coeur d'Alene Mining District. Hecla owns 100% of the Lucky Friday mine and the property in which the Lucky Friday vein exists or in which the vein is projected to exist in the foreseeable future.



The Lucky Friday is a deep underground silver-lead mine which, until more recent years, used conventional underground mining methods. Mill tailings are pumped back into the mine as hydraulic sandfill to backfill the mined-out areas. The ore-bearing structure at the Lucky Friday mine is the Lucky Friday vein, a fissure vein typical of many in the Coeur d'Alene Mining District. The ore body is located in the Revett Formation which is known to provide excellent host rocks for a number of ore bodies in the Coeur d'Alene District. The Lucky Friday vein strikes northeasterly and dips steeply to the south, with an average width of six to seven feet. The principal ore minerals are galena and tetrahedrite, with minor amounts of sphalerite and chalcopyrite. It appears that the ore occurs as a single continuous ore body in and along the Lucky Friday vein. The major part of the ore body has extended from the 1200-foot level to and below the 5300-foot level, currently the deepest fully developed level in the mine.

The ore produced from the mine is processed in a 1,000-ton-per-day conventional flotation mill at the Lucky Friday mine site. The flotation process produces both a silver-lead concentrate and a zinc concentrate. Approximately 98% of the silver and lead is recovered and approximately 88% of the zinc is recovered. Adequate provision has also been made for disposal of mine waste and mill tailings in a manner which complies with current federal and state environmental requirements.

The Lucky Friday silver-lead concentrate product is shipped in approximately equal proportions to the ASARCO smelter at East Helena, Montana, and to the Cominco Ltd. smelter at Trail, British Columbia, Canada. The silver contained in the concentrates shipped to ASARCO is returned to the Company under a tolling arrangement. The Company then sells to major metal brokers, currently Prudential-Bache Metals Company, Inc. and J. Aron and Company. The pricing of the silver is based on the New York Commodity Exchange quotations. The lead and gold contained in the concentrates are sold to ASARCO. All of the metals contained in the concentrates shipped to Cominco are sold directly to Cominco.

In the event agreements with ASARCO and Cominco are terminated, the Company believes that a new agreement could be negotiated with ASARCO, Cominco or other smelters at terms that would not have a material adverse affect upon the overall operation of the Company.

All of the Lucky Friday zinc concentrates are shipped by rail to Trail, British Columbia, Canada, and are sold under an agreement with Cominco Ltd.

In deep mines operated by the Company in the Coeur d'Alene Mining District, where the persistence of mineralization to greater depths may be reliably inferred from operating experience and geological data, the Company's policy for operating and investment reasons is to develop new levels at a minimum rate consistent with the requirements for uninterrupted and efficient ore production. A new level is developed and brought into production only to replace diminishing ore reserves from levels being mined out.

The length and strength of the ore body have not materially diminished on the lowest developed level of the mine. Based upon this factor, drilling data and extensive knowledge of the geologic character of the deposit, and many years of operating experience in the Lucky Friday Mine and Coeur d'Alene Mining District, there are no geologic factors known at present which appear to prevent the continuation of the Lucky Friday ore body for a considerable distance below the lowermost working level. Although there can be no assurance of the extent and quality of the mineralization which



may be developed at greater depths, the existing data and operating experience justify, in the opinion of the Company's management and based upon industry standards, the conclusion that the mineralization will extend well below the 6200-foot level, which is the existing bottom of the mine's Silver Shaft.

The current principal mining method, Lucky Friday Underhand Longwall (LFUL), piloted in 1985 and 1986, has been fully implemented in order to achieve full production capacity. This is the primary method being employed in the Lucky Friday mine and utilizes mechanized equipment, a ramp system and cemented sand fill. The LFUL method has proven effective in reducing mining costs and limiting rockburst activity. Without this new mining method, the mine would be unworkable in certain stopes because of the unstable nature of the rock. However, rock mechanics continue to be a problem in the mile-deep mine. The Company continues to work aggressively with the LFUL method to reduce mining costs and improve safety.

Information with respect to production and proven and probable mineral reserves for the past five years is set forth in the table below:

	Years				
	1989	1988	1987 <sup>(1)</sup>	1986 <sup>(1)</sup>	1985
<u>Production (100%)</u>					
Ore milled (tons)	138,720	120,200	45,165	82,041	276,817
Silver (ounces)	1,904,038	1,786,716	667,442	1,324,182	4,740,971
Gold (ounces)	944	778	261	611	2,429
Lead (tons)	16,094	12,675	4,548	10,890	34,789
Zinc (tons)	3,253	2,301	989	1,254	3,915
Copper (tons)	281	309	110	143	534

(1) Commercial production was suspended on April 11, 1986 due to depressed metal prices and resumed on June 1, 1987.

Proven and Probable  
Mineral Reserves (1)

Total tons	458,800	598,200	639,100	604,200	670,300
Silver (oz. per ton)	16.1	15.4	15.9	16.7	16.6
Lead (percent)	14.4	13.0	12.3	12.3	11.9
Zinc (percent)	2.4	2.3	2.2	1.9	1.9

(1) Reserves lying above or between developed levels are classified as Proven Reserves. Reserves lying below the lowest developed level, projected to 100 feet below the lowest level or to one-half the exposed strike length, whichever is least, are classified as probable reserves. Mineralization known to exist from drill hole intercepts does not meet the Company's current Proven or Probable Reserve criteria and is excluded from these reserve categories.

At December 31, 1989, there were approximately 183 employees at the Lucky Friday mine. The United Steelworkers of America is the bargaining agent for the Lucky Friday hourly employees. The current labor agreement will expire on June 2, 1990.

### Escalante Unit - Utah

The Escalante Silver mine is located in Iron County approximately 40 miles west of Cedar City in southwest Utah. The mine properties consist of patented and unpatented lode mining claims, unpatented millsites, fee surface lands and mineral rights held under four leases granted by the State of Utah. The total surface area covered by the mine properties is more than 18,000 acres. The Company ceased mining operations at the Escalante Silver mine on December 30, 1988. The currently known ore body at the Escalante mine has been mined out and exploration efforts to discover more ore have not been successful.

A relatively standard precious metal milling facility exists at the property. The mill is operating 24 hours per day, 7 days per week and is handling more than 900 tons of ore per day. Approximately 76% of contained silver is currently being recovered. The mill is expected to remain in operation until mid-1990 and to process approximately 184,000 stockpiled tons of ore containing an estimated 6.65 ounces of silver per ton. The mill will then be placed on a care-and-maintenance status and the equipment stored until the Company has an opportunity to use it elsewhere.

The final product is a silver dore' bullion which, as produced at the Escalante mine, is a partially refined metal containing approximately 90-98% silver. In order to meet specifications for delivery on major metal exchanges, either domestically or internationally, such dore' bullion must be further refined to a purity of 999 parts per thousand (999 fine). The Company currently ships the Escalante doré to the Sunshine Mining Company for further refining. After refining, the silver is sold by the Company to metal brokers, currently Prudential-Bache Metals Company, Inc. and Shearson-Lehman Hutton, under short-term contracts. Pricing of the silver and gold is based on the New York Commodity Exchange quotations.

In addition to the mill and refinery, the surface facilities consist of a maintenance shop, warehouse facilities, assay laboratory, change room facilities and other ancillary facilities to support the operations. Adequate provision has been made for disposal of mine waste and mill tailings in a manner which complies with current federal and state environmental requirements.

The following table sets forth information with respect to production and Proven and Probable Mineral Reserves for the past five years:

<u>Year</u>	<u>Production (100%)</u>		<u>Proven and Probable Mineral Reserves</u>	
	<u>Ore Milled (Tons)</u>	<u>Silver (Ounces)</u>	<u>Ore (Tons)</u>	<u>Silver (Oz. Per Ton)</u>
1989	322,068	1,626,965	- -	- -
1988	304,245	1,831,172	- -	- -
1987	294,098	2,252,942	586,600	7.9
1986	305,717	2,274,924	917,700	9.4
1985	296,946	2,438,978	1,689,000	9.7



The Company employs approximately 37 employees at the Escalante Unit. The employees at the Escalante Unit are not represented by a bargaining agent.

#### Galena Unit - Coeur d'Alene District, Idaho

The Galena mine is operated by ASARCO and located on property owned by Callahan Mining Corporation (Callahan) approximately two miles west of Wallace, Idaho.

The Company has a 25% participation in ASARCO's lease (which provides for a 50% net profits royalty to Callahan). The Company now pays 25% of all costs attributable to the lease and realizes an effective 12-1/2% of the defined net profits from production at the Galena Mine.

The Galena mine, an underground operation, is one of the larger silver producing mines in the United States. Mining is accomplished using conventional underground methods, and the coarser portion of mill tailings are pumped back into the mine to backfill the mined areas.

The Galena mine veins, which are the fissure type, occur principally in and along faults which exist as linking structures between major faults. The enclosing wall rock is quartzite of the St. Regis and Revett formations of the Precambrian belt series. The principal ore mineral in the veins of the Galena mine is tetrahedrite, a silver-copper-antimony sulfide.

Ore from the Galena mine is milled at the Galena plant at a rate of 800 tons per day. The product of the Galena mill is a silver-copper concentrate. Approximately 96% of the silver in the milled ore is extracted in the concentrating process. The concentrate is shipped and sold to ASARCO.

The estimated Mineral Reserves for the Galena mine are calculated by ASARCO's engineering department. ASARCO does not attempt to delineate mineral reserves beyond those required for the orderly development of the mine. However, based upon experience and available knowledge of the geologic character of the mine, it is likely to assume that mineral reserves will extend for a considerable distance below the existing lowermost workings.

The following table sets forth the information with respect to production and Proven and Probable Mineral Reserves for the past five years.

<u>Production (12½%)</u> <sup>(1)</sup>	<u>Years</u>				
	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>
Ore milled (tons)	25,187	25,262	25,094	25,102	25,022
Silver (ounces)	385,068	381,078	411,005	499,715	512,941
Copper (tons)	129	125	121	141	154
Gold (ounces)	41	58	60	60	73
 <u>Proven and Probable</u>					
<u>Mineral Reserves (12½%)</u> <sup>(1)</sup>					
Total tons	147,000	154,900	149,700	129,700	135,600
Silver (oz. per ton)	16.2	16.4	16.1	15.6	17.2
Copper (percent)	0.5	0.5	0.5	0.5	0.5

(1) Reflects only the Company's share of production and mineral reserves, net of Callahan's 50% net profits royalty.

### Coeur Unit - Coeur d'Alene District, Idaho

This silver mine, located near Osburn, Idaho, is operated by ASARCO under a long-term agreement with Coeur d'Alene Mines, the owner of the Coeur Unit property. The Company has a 5% participation in all costs and proceeds.

The Coeur mine is an underground operation using conventional underground mining methods. Mill tailings are hydraulically pumped back into the mine as sandfill to backfill mined out areas.

The veins of the Coeur mine, like those in the Galena mine, are found principally in and along faults occurring as linking structures between major faults. The enclosing wall rock is quartzite of the St. Regis and Revett formations of the Precambrian belt series. The principal ore mineral in the veins of the Coeur mine is tetrahedrite, a silver-copper-antimony sulfide.

Ore from the Coeur mine is milled in the 600-ton-per-day mill located at the Coeur mine. The product of the Coeur mill is a silver-copper concentrate and approximately 98% of the silver in the milled ore is extracted in the concentrating process. The concentrates are shipped and sold to ASARCO.

The estimated mineral reserves for the Coeur mine are calculated by ASARCO's engineering department. ASARCO does not attempt to delineate mineral reserves beyond those required for the orderly development of the mine.

The following table sets forth information with respect to production and Proven and Probable Mineral Reserves for the past five years.

Production (5%) <sup>(1)</sup>	Years				
	1989	1988	1987	1986	1985
Ore milled (tons)	7,952	7,219	7,728	7,731	7,561
Silver (ounces)	109,923	105,781	122,846	137,156	131,413
Copper (tons)	50	47	58	62	61
Gold (ounces)	22	16	20	17	16
Proven and Probable Mineral Reserves (5%) <sup>(1)</sup>					
Total tons	18,700	21,900	24,800	35,000	44,400
Silver (oz. per ton)	16.8	16.7	16.6	19.8	20.7
Copper (percent)	0.8	0.7	0.8	0.9	0.9

(1) Reflects only the Company's share of production and Mineral Reserves.

### Greens Creek Joint Venture - Admiralty Island, Alaska

In 1987 the Company purchased a 28% interest in the Greens Creek Joint Venture from BP Minerals America, a wholly owned subsidiary of British Petroleum Company Ltd., predecessor in interest to Kennecott Corporation, a wholly owned subsidiary of RTZ. Greens Creek Mining Company, a wholly owned subsidiary of Kennecott Corporation, is the operator of the venture. Other venturers are CSX Energy, Inc. and Exalas Resources Corporation, a subsidiary of Mitsubishi Corporation. The Joint Venture commenced initial ore production at the Greens Creek mine, a trackless underground mine, in



the first quarter of 1989, after substantial completion of surface construction of the mill, mine buildings, ship loading facility and underground development.

The mine is located on Admiralty Island, an environmentally sensitive area designated as a national monument. The entire project covers about 300 acres and includes an ore concentrating mill, tailings impoundment, 13 miles of road, a ship-loading facility and ferry dock. In order to minimize the impact on the island's environment, workers do not live on site but rather commute daily from Juneau on a specially built ferry.

Ore from the Greens Creek mine is milled at a 1,000-ton-per-day mill which was constructed adjacent to the mine site. The mill produces saleable lead, zinc and bulk lead/zinc concentrates. The Greens Creek concentrates are sold to major European and Asian smelters. The bulk concentrates are shipped to Metaleurop's smelter in France, Samim's smelter in Sardinia, and Pasminco Europe's smelter in the United Kingdom. The zinc concentrates are shipped to Dowa Mining Company's Japanese smelter, Korean Zinc's Korean smelter and Vieille Montagne's Belgium smelter. All of the lead concentrate is shipped to MetalEurop's smelter in France. The concentrates are shipped from a marine terminal located about nine miles from the mine site.

The Greens Creek deposit consists of zinc, lead, iron and minor copper sulfides with substantial contained gold and silver values, having a blanket-like form of from a few inches to over 50 feet in thickness. The ore is thought to have been laid down on the ocean floor by an "exhalative" process, i.e., volcanic-related rifts or vents spewed out the base and precious metals onto the ocean floor. The minerals settled down to produce deposits of varying thickness and grades, depending on the distance from the vent.

The estimated mineral reserves for the Greens Creek mine are calculated by Greens Creek Mining Company's engineering department.

Information with respect to production and Proven and Probable Mineral Reserves is set forth in the table below:

<u>Production (28%)</u> <sup>(1)</sup>	<u>Years</u>	
	<u>1989</u>	<u>1988</u>
Ore milled (tons)	74,108	- -
Silver (ounces)	1,446,365	- -
Gold (ounces)	6,588	- -
Zinc (tons)	5,559	- -
Lead (tons)	2,685	- -
 <u>Proven and Probable</u> <sup>(1)</sup>		
<u>Mineral Reserves (28%)</u>		
Total tons	817,000	980,000
Silver (ounces per ton)	21.4	24.0
Gold (ounces per ton)	0.19	0.18
Zinc (percent)	8.4	9.7
Lead (percent)	3.4	3.9

(1) Reflects only the Company's 28% share of production and Mineral Reserves.

At December 31, 1989, there were 225 employees at the Greens Creek Joint Venture. The employees at the Greens Creek Joint Venture are not represented by a bargaining agent.

#### Yellow Pine Unit - Valley County, Idaho

The Yellow Pine property consists of 26 patented claims located near Yellow Pine in central Idaho, which are held by the Company under lease from the Bradley Mining Company of San Francisco, California. The property is subject to production royalties equal to 6% of net smelter returns plus 10% of cumulative cash flow. The related amended mining lease and agreement also provides for a minimum royalty payment of \$3,500 per month reduced by current production royalties.

During 1988 the operation produced 20,701 ounces of gold under contract with Pioneer Metals Corporation of Vancouver, B.C., Canada for processing oxide gold-bearing material from the Company's property. There was no commercial production at the mine during 1989. However, a new \$4.5 million heap leach facility was constructed with start-up scheduled for the second quarter of 1990. During 1989, 93,000 tons of ore were stockpiled in anticipation of plant start-up. During its first full season of operation in 1990, the facility is expected to produce approximately 60,000 ounces of gold. The Company expects to have the gold doré, produced at the Yellow Pine Unit, refined by a major precious metals refinery. Fine gold will be returned to the Company under a tolling arrangement and sold to major metal trading companies.

At December 31, 1989 the Company employed 10 employees at the Yellow Pine Unit. It is anticipated that the project will last two seasons and will employ about 100 people during the seven to eight months the mine is in operation each year. About one-third of those will be employed by the Company to operate the gold recovery plant and to handle management and engineering duties. The remainder will work for companies contracted to do the mining. The employees at the Yellow Pine Unit are not represented by a bargaining agent.

Information with respect to production and Proven and Probable Mineral Reserves is set forth in the table below:

<u>Production (100%)</u>	<u>Years</u>		
	<u>1989</u>	<u>1988</u>	<u>1987</u>
Ore crushed (tons)	93,000	278,193	- -
Gold (ounces)	- -	20,701	- -
Silver (ounces)	- -	6,802	- -
 <u>Proven and Probable Mineral Reserves</u>			
Total tons	1,005,500	815,000	815,000
Gold (oz. per ton)	.08	.09	.08

In addition, mineralized sulfide material, estimated at between 15 and 20 million tons containing approximately 0.09 ounce of gold per ton, is also located on the property. The Company is currently evaluating the economic feasibility of developing and mining this extensive gold-bearing deposit.



### Apex Unit - Utah

On March 6, 1989, the Company exercised its option to purchase the Apex germanium-gallium-copper mine and processing plant located near St. George, Utah. The property was acquired for \$5.5 million through an asset purchase agreement with St. George Mining Corporation, a wholly owned subsidiary of Musto Exploration Ltd. (Musto) of Vancouver, British Columbia. Musto has retained a 15% defined net proceeds royalty interest in the property, subject to recoupment of the Company's acquisition and preproduction costs. During 1989 the Company refurbished the existing equipment, installed new extraction systems, and added more automation to make the processing plant more efficient.

The Apex mine is located in Washington County approximately 23 miles west of St. George, Utah, on the east flank of the Beaverdam Mountains at an elevation of 5,600 feet. The mine property consists of twenty-four patented mining claims and nine unpatented lode mining claims. Two of the unpatented lode mining claims are leased with the remainder of the claims owned in fee simple. The total surface area covered by the mine properties is approximately 700 acres.

Access to the ore body is through an 800-foot adit on the 5434 level, a spiral decline driven on a 15% grade to the 5181 level, and a rehabilitated internal shaft. The use of the decline enables the mine to be a highly mechanized operation where rubber-tired equipment can move freely in and out of the mine workings. Mining operations are conducted using an underhand cut and fill method.

The ore is mined 300 feet underground, brought to the surface and hauled by truck approximately ten miles to a metallurgical processing facility located on land leased from the Shivwit-Paiute Indian Tribe. The metal will be recovered using a series of solvent extraction, precipitation, and hydrometallurgical processes. The final products will be sodium germanate concentrate ( $\text{Na}_2\text{GeO}_3$ ), 99.99% pure gallium metal, and a copper product. Sodium germanate is anticipated to be the largest revenue contributor.

The major uses of germanium are in infrared optics, fiber optics and chemical products. The major European primary refiners of germanium are Metallurgie-Hoboken Overpelt SA, MetalEurop and Otavi Minen AG. Eagle-Picher Industries and Cabot Corporation are the only existing germanium refineries in the United States.

The major uses of gallium are in light-emitting diodes and electronic equipment. Major producers and refiners of gallium are Rhone Poulenc, Ingal, Sumitomo Metal Mining Co., Cominco Electronic Materials Inc. and Eagle-Picher Industries.

The Company intends to sell the sodium germanate and 99.99% pure gallium under long-term, fixed-quantity contracts. Neither of these products have exchange-quoted prices. Prices will be negotiated between the Company and its customers. Pricing of the copper is planned to be based on the New York Commodity Exchange (COMEX) high-grade copper contract and published producer prices.



Proven and Probable Reserves at December 31, 1989 totaled 230,200 tons grading 0.046% gallium, 0.105% germanium and 1.6% copper. At December 31, 1989 there were approximately 74 employees at the Apex Unit. At full production, which is planned in mid 1990, the operation will employ approximately 85 people. The employees at the Apex Unit are not represented by a bargaining agent.

#### Granduc Mines Limited - British Columbia, Canada

In January 1988, the Company purchased 1.1 million shares of Granduc common stock, in addition to 1,715,000 shares of common stock it previously owned, at a price of \$3.95 (Canadian) per share. Commencing in 1987 and continuing through 1989, Granduc issued shares of common stock pursuant to flow-through financing agreements with several Canadian limited partnerships whereby the limited partnerships receive shares of Granduc in return for financing Canadian exploration expenditures. Granduc's deduction for Canadian income tax purposes arising from the expenditures of these exploration funds are renounced in favor of the limited partnerships. As of December 31, 1989, the Company owned approximately 38.5% of the outstanding common stock of Granduc.

A joint venture was formed in 1986 to further explore Granduc's Sulphurets gold-silver property in northern British Columbia. Granduc, with a 40% interest in the joint venture and Newhawk Gold Mines Ltd., the operator, with the remaining 60% interest, continued to explore the property in 1989 with encouraging results. The 1989 exploration program, costing \$11.6 million (Canadian), confirmed the existence of over 700,000 tons of proven and probable in-situ geological reserves at an average cut grade of approximately 0.43 ounces of gold per ton and 19.7 ounces of silver per ton. The joint venture, with the assistance of consultants, is conducting feasibility studies in order to develop further plans. A decision on the commercial viability of the property will probably be made in 1990.

Granduc fully participated in the 1989 work program and its share of expenditures was approximately \$4.6 million (Canadian) principally related to further underground exploration, diamond drilling and feasibility costs. Granduc plans to fund its 40% share of 1990 exploration, development and feasibility costs.

#### INDUSTRIAL MINERALS

##### Kentucky-Tennessee Clay Company

The Company's subsidiary, Kentucky-Tennessee Clay Company (K-T), mines and ships a complete line of ball clays, which are plastic clays (or clays that are easily molded) and which fire to a light buff color and are easily vitrified. Ball clay is of sedimentary origin and consists of several basic clay minerals along with a slight amount of organic content, a combination of materials that gives ball clay its unique character. The principal use of ball clays is in the ceramic field, which includes use for such items as pottery, dinnerware, wall tile, electrical insulators and sanitaryware. Ball clay is also used in refractories and abrasives and has certain applications in other specialty industries.

K-T mines and processes different grades of specialty ball clays in Kentucky, Tennessee and Mississippi. Processing mills, office buildings, shop buildings and storage sheds are located in Mayfield, Kentucky; Gleason and Whitlock, Tennessee; and Crenshaw, Mississippi.



Mining of ball clay is accomplished through strip mining methods. The mining activity requires definition drilling and the removal of overburden in order to expose clay strata to be mined. Mining activity is selective based on clay grade and strata control. The clays are mined with drag lines, power shovels and backhoes, loaded into trucks and hauled to one of K-T's plants for processing. Processing of ball clay generally consists of shredding and classification of clay by various grades, hammer or roller milling to reduce particle size, drying and packaging. The grades can be shipped in bulk or blended and bagged in order to meet a particular customer's requirements. A particular clay or blend of several clays can also be shipped to customers in slurry form in tanker trucks or rail cars.

There are many grades of ball clay which K-T mines, processes and blends to meet the specifications and requirements of its various customers. Different uses may require mixtures of ball clay having substantially different physical properties, and K-T, through many years of experience and ongoing work performed in its laboratories, possesses a high degree of expertise that enables it to meet customer requirements with minimal advance notice. It should be noted, however, that the market for a particular grade of ball clay could change, particularly through the use of substitute products, and K-T cannot predict the extent to which any substitute products may be developed that might adversely affect its business. The marketing of ball clays is directed from K-T's headquarters in Mayfield, Kentucky. K-T's marketing personnel are trained in ceramic engineering or related technical fields, which enhances the ability of K-T to rapidly meet any changing requirements of its customers.

K-T has identified or delineated deposits of ball clay on numerous properties which it holds in the counties in which current operations are being conducted. Such properties are either owned in fee or leased. The royalties or other holding costs of leased properties are consistent with the industry, and the expiration of any particular lease would not affect K-T's ability to operate at current levels of operations for in excess of 20 years. K-T is also continuously exploring for new deposits of ball clay, either to replace certain grades of clay that may become mined out or to locate new deposits that can be mined at lower cost.

Minimum standards for strip mining reclamation have been established by various governmental agencies which affect K-T's ball clay mining operations. The Tennessee Surface Mining Law and the Mississippi Geological Economics and Topographical Survey, Division of Mining and Reclamation, require K-T to post a performance bond on acreage to be disturbed. The release of the bond is dependent on the successful grading, seeding and planting of spoil areas associated with current mining operations. K-T is also subject to federal strip mining control legislation which became effective in 1977. In addition, the United States Environmental Protection Agency has issued guidelines and performance standards which K-T must meet. K-T may be required to obtain other licenses or permits from time to time, but it is not expected that any such requirement will have a material adverse effect upon its business or the cost of operations.



As of December 31, 1989, a reserve for mine reclamation of approximately \$1,243,000 has been established representing estimated future costs of restoring abandoned and currently disturbed ball clay mining areas. Each year K-T performs a calculation of the amount of reserve needed to reclaim each and every ball clay mine site in compliance with current laws. The Company believes that the present reserve balance is adequate to cover required reclamation costs based upon current legal requirements and experience with mined-out sites.

Approximately 199 people are employed by K-T at its ball clay operations. Thirty-seven hourly employees are represented by the United Steelworkers of America. The 3-year labor agreement will expire on February 8, 1991.

K-T acquired the kaolin operations and assets of Cyprus Minerals Company's clay division on February 17, 1989. The acquisition includes kaolin mines and plants at Deepstep and Sandersville, Georgia, and Aiken, South Carolina.

Kaolin, or china clay, is a relatively pure white clay of sedimentary origin, and is consumed in a variety of end uses. Kaolin is a unique industrial mineral because of its wide range of chemical and physical properties.

The Kaolin Division of K-T mines, processes and blends numerous grades of clay to meet the specifications and requirements of its customers. K-T's kaolin production is used in ceramic whiteware, which is a common use with K-T's ball clay; in textile-grade fiberglass; as rubber and paper fillers; and in miscellaneous plastics, adhesives and pigment applications.

Markets for kaolin are currently very strong and growth is hoped for in the future. However, adverse shifts in market demand could occur due to mineral substitution and decreased demand for end use products, which could adversely impact the demand for kaolin. Kaolin currently competes with minerals such as calcium carbonate, talc and silica in many filler and pigment applications, but the substitution of other minerals for kaolin in ceramic and fiberglass applications is limited. The marketing of kaolin to the ceramics industry is carried out by K-T's sales force which enjoys extensive experience and expertise in that industry. Marketing to other industries is done through sales and distribution agents.

Mining of kaolin is done by open-pit methods. Ore bodies are identified and delineated by exploration drilling and overburden is removed by scrapers down to favorable clay strata. Select mining of clay is then accomplished by backhoe with over-the-road truck haulage to the processing and stockpiling facilities. K-T operates four mines in Georgia, serving processing plants located at Sandersville and Deepstep, Georgia. K-T also operates three mines located in South Carolina, serving a processing plant located in Aiken, South Carolina.

Processing of the clays is completed by the air-floating method where clay is shredded, dried, ground and separated by particle size at the Sandersville, Deepstep and Aiken locations. In addition, clay is also processed into a water slurry mixture at the Sandersville location.

K-T's Kaolin Division holds in excess of 20 years of Reserves based on current sales and product mix. Reserves are held on fee and leased property and K-T plans to continue a very active kaolin exploration and development program.



The Kaolin Division operates its mines in Georgia and South Carolina under mine permits issued by the Environmental Protection Division, Department of Natural Resources of the State of Georgia, and the Land Resource Conservation Commission, Division of Mining and Reclamation of the State of South Carolina. All mines have current permit status and are in good standing. In addition, both the states of Georgia and South Carolina are in the process of enacting regulations requiring National Pollution Discharge Elimination System (NPDES) permits for mine sites. Processing plants currently require NPDES permits in the State of Georgia and permit application is now being prepared for the Sandersville location. The Kaolin Division had, as of December 31, 1989, a mine reclamation reserve of approximately \$239,000 based upon experience and the progress of ore body development.

Approximately 101 people are employed by K-T at its Kaolin Division with less than 40% of the labor force being represented by the Cement, Lime, Gypsum and Allied Workers, Division of International Brotherhood of Boilermakers. The current labor contract at the Sandersville, Georgia operation expires on March 1, 1992. Employees at the Aiken, South Carolina plant voted on September 14, 1989 to decertify the International Brotherhood of Boilermakers. The kaolin operations have had a history of good labor relations and the current labor environment is considered excellent.

The following table sets forth information with respect to clay production (1989 includes kaolin) for the past five years:

<u>Year</u>	<u>Tons Shipped</u>
1989	633,697
1988	431,641
1987	410,914
1986	398,769
1985	401,270

Export sales accounted for 21.5%, 17.9% and 15.8% of K-T's sales during 1989, 1988 and 1987, respectively.

#### Colorado Aggregate Company

The Company, through its subsidiary, Colorado Aggregate Company (CAC), mines and sells volcanic rock (scoria) for use as briquettes in gas barbecue grills, landscaping, and aquarium gravel. Volcanic scoria is a lightweight clinker-like material produced during the volcanic eruption process as magma is thrust up and cooled to form cinder cones. These cones occur frequently in the geological environment but are uniquely typed by density, texture and color, which ranges from pink through deep red to black.

Scoria for use mainly as briquettes is mined, crushed, screened and bagged at the Company's Mesita Mine in Mesita, Colorado, approximately 50 miles southeast of Alamosa, Colorado. Landscape scoria is mined, crushed and screened at the Company's Red Hill mine in northern New Mexico near Antonito, Colorado and is trucked to Blanca, Colorado, for bagging and shipping by truck or rail. All mining is open pit with minimal requirements for the removal of overburden.



The principal customers for scoria briquettes are manufacturers of gas barbecue grills, most of which are located in the eastern United States and, to a lesser extent, in several foreign countries. Landscapers and distributors of landscaping materials located in the United States east of the Continental Divide and in eastern Canada are the principal customers for scoria landscape stone.

The Mesita Mine is owned by the Company. Due to the seasonal nature of CAC's business, it is usually anticipated that most of its annual sales and profits will be generated in the first two quarters of each calendar year. The Company has over 20 years of mineral reserves at the Mesita, Colorado location and has developed in excess of 15 years of mineral reserves at the Red Hill mine. The Company transferred its landscape scoria production from the San Antonio mine to the Red Hill mine during 1989. The Red Hill mine is located on leased property and is subject to several defined production royalties.

The following table sets forth information with respect to production for the past five years.

<u>Year</u>	<u>Aggregate Tons Shipped</u>
1989	73,274
1988	68,065
1987	63,468
1986	54,555
1985	53,858

CAC employed 76 employees as of December 31, 1989, none of whom are represented by a bargaining agent.

#### PROPERTIES ON STANDBY

##### General

Various mining operations of the Company have been placed on a standby basis. Placing a mining property on a standby basis during periods of depressed metal prices, thereby preserving a depletable asset, is not uncommon in the mining industry. The more important of these properties are described below.

##### Lisbon Valley Project - Utah

The Company leases a block of property comprising approximately 1,100 acres of private, state and county lands in the Lisbon Valley district about 30 miles south of Moab in San Juan County, Utah. In 1976, the Company entered into a joint venture with Union Carbide Corporation (now succeeded in interest by Umetco Minerals Corporation, a wholly-owned subsidiary of Union Carbide) whereby Union Carbide became the operator of the property. The joint venture agreement provides for equal sharing of all costs and production. A second agreement provides for the milling of the Company's share of production at Union Carbide's mill. In December 1982, the property was placed on a maintenance and standby basis because of the depressed markets for uranium and vanadium. It is fully developed and ready for production mining. However, at current metal prices, the property cannot be placed into production at a profit.



#### Mooseland Project - Nova Scotia, Canada

During February 1988, the Company, through its subsidiary, Hecla Mining Company of Canada Ltd., exercised an option to acquire a majority interest in Acadia Minerals Ventures Limited's (Toronto, Ontario) Mooseland, Nova Scotia, gold property, located 45 miles northeast of Halifax, Nova Scotia. The option agreement, as amended, provides, among other things, that if the Company, which is the operating manager of the property, proceeds with a comprehensive feasibility study of the property and then places the property into production, it will be responsible for all preproduction development costs for which the Company will receive a 66.5% undivided interest in the property. After the property is in production, the Company will recoup from 90% of defined cash flow all preproduction development and certain other costs incurred; thereafter the Company will receive 66.5% of cash flows.

In June 1988 the Company entered into an agreement with Biron Bay Resources Ltd. (Biron Bay), incorporated in Ontario, Canada, to fund the project feasibility study. The agreement called for Biron Bay to provide \$9.5 million (Canadian) to the Company as manager of the joint venture. Any funds required in excess of \$9.5 million (Canadian) will be provided by the Company. Upon completion of scheduled funding by Biron Bay of \$9.5 million (Canadian), Biron Bay was to have earned a 41.67% interest of the Company's interest in the project. However, during 1989 Biron Bay discontinued its schedule of funding and the project was placed on a standby basis while evaluating alternative funding methods. Biron Bay's interest is subject to reduction, as defined in the agreement, in the event of nonpayment.

#### Caladay Project - Coeur d'Alene District, Idaho

The Caladay Project is a joint venture between Callahan Mining Corporation, ASARCO and the Company on property adjacent to the Galena Unit in the Coeur d'Alene Mining District of northern Idaho. Callahan is the operator of this venture and in 1980 began a four-year program to sink a shaft to the 5100-foot level at a cost of \$26.6 million, including preproduction and exploration and development work. In 1982 the Company entered into a long-term lease agreement with Callahan to include the Company's Hornsilver-Peerless properties, which adjoin the Caladay Project, in this venture. Under the terms of the 1982 agreement, the Company retains a 30% net profits interest in Hornsilver-Peerless after reimbursement of expenditures to Caladay.

Following completion of the shaft in early 1985, a long-term underground exploration program was begun. Results of the initial lateral work and drilling were disappointing.

At mid-year 1987, after Callahan completed its required minimum expenditure of \$26.6 million, the Company elected to maintain its 12% interest in the project and participated in a \$4.0 million program to further explore the properties. During 1988 further exploration in a northwesterly lateral discovered a wide zone of low-grade silver-lead mineralization beneath the 4900-foot level.

During 1989 the Company decided not to continue as a contributory participant in the project. While the Company, as of December 31, 1989, owned an 11.5% interest in the project, its interest will be further diluted as future expenditures are funded by the other joint venturers. Callahan suspended the exploration program in December 1989 due to low silver prices and to conserve cash.



## OTHER INTERESTS

### Uranium Royalties

The Company receives minimum royalties from certain of its uranium properties located in the Ambrosia District near Grants, New Mexico, leased by the Company to Rio Algom Corporation, successor to Kerr-McGee Corporation. The leases covering the properties continue in effect so long as these royalties are paid but terminate if defined mining operations are not conducted on such properties during a continuous period of 36 months. It is the Company's understanding that uranium operations on the properties have been suspended. Therefore, these royalties, which are immaterial to the business of the Company, will eventually cease to be received.

The Company also holds a 2% royalty interest from uranium ores mined from certain other properties in the Ambrosia Lake District, which are owned by others.

The Company does not have current independent or verified mineral reserve estimates for any of such properties. In addition, in view of the severely depressed market price for uranium which now exists, uranium royalties are immaterial to the operating results of the Company.

### Uranium Mill Tailings Processing

In October of 1976 the Company acquired two deposits of old uranium mill tailings from Foote Minerals Company, then a subsidiary of Newmont Mining Corporation. One deposit is located near Naturita, Colorado, and the other is located near Durango, Colorado. Commencing in 1977 the uranium tailings located at the Naturita site were removed and processed at a nearby site. Delays and requirements imposed by the government agencies in connection with obtaining an operating license for the Durango site resulted in a decision by the Company in December 1978 to suspend further efforts to obtain an operating license to process the tailings at the Durango site.

Both the Naturita site (original location of the tailings) and the Durango site are subject to federal/state of Colorado cleanup obligations under the Uranium Mill Tailings and Radiation Control Act of 1978 (UMTRCA). Cleanup activities continue at the Durango and Naturita sites. It is the Company's opinion, based upon the information available at this time, that the cleanup obligations will not have a material adverse impact upon the business of the Company.

In September 1986, an eminent domain action was brought by the State of Colorado in Colorado State District Court to acquire title to the Durango site pursuant to the federal/state cleanup authority under UMTRCA. In July 1987, the court entered a judgment authorizing the taking of the property and awarding the Company approximately \$3 million in compensation. This judgment was appealed by the State of Colorado to the Colorado Court of Appeals. In May 1989, the Colorado Court of Appeals reversed the trial court's judgment with respect to the amount of compensation due the Company and remanded the case to the Colorado District Court for a new trial on the compensation issue. As a result of the Colorado Supreme Court's denial of the Company's petition to hear an appeal of the Court of Appeals' decision, the Company anticipates the compensation issue to be scheduled for a new trial sometime in 1990.



In October 1987, the Company initiated litigation in Colorado Federal District Court against the United States of America and the State of Colorado seeking a determination that the federal government had an obligation in conjunction with the State of Colorado to clean up the uranium tailings located at the Naturita site and at the site at which the Naturita tailings were reprocessed (Processing Site). In an order issued in October 1988, the court found that the Naturita Site was subject to federal/state cleanup under UMTRCA by admission of the federal government. The court found that there was no such federal/state cleanup obligation with respect to the Processing Site. The portion of the court's order denying a federal/state cleanup obligation under UMTRCA for the Processing Site has been appealed by the Company. It is the opinion of the Company's management, based upon the information available at this time, that the outcome of the suits and proceedings now pending will not have a material adverse effect on the financial condition of the Company and its consolidated subsidiaries.

#### Golden Dome - Sierra County, California

The property is located approximately five miles southwest of Loyalton, California and is comprised of 3,020 acres of unpatented mining claims and a mining lease on 40 acres of fee land. On January 4, 1990, the Company sold its interest in the Golden Dome property to Tenneco Minerals Company.

#### EXPLORATION

The Company conducts its exploration activities from offices located in Coeur d'Alene, Idaho; Reno, Nevada; Toronto, Ontario; Republic, Washington and Juneau, Alaska.

In May 1989 the Company announced the formation of a joint exploration company, Lucky Eagle, with Agnico-Eagle Mines Limited ("Agnico-Eagle") of Toronto, Ontario. The Company and Agnico-Eagle contributed exploration properties to Lucky Eagle thereby initially earning 57% and 43% ownership interests, respectively. The Company will manage domestic exploration activities while Agnico-Eagle will manage Canadian exploration activities. The Company anticipates that Lucky Eagle may provide expanded opportunities and capabilities for Canadian exploration.

The Company owns or controls in excess of 25,000 acres of patented and unpatented mining claims and Crown-grant claims in thirteen states and in Quebec, Ontario, Nova Scotia, Northwest Territories and British Columbia, Canada. Exploration activities are conducted on portions of these properties on a continuing basis with additional properties being added to, and some properties being dropped from, this inventory as deemed prudent for a sustained exploration effort. Exploration expenditures for the three years ended December 31, 1989, 1988 and 1987 were approximately \$8.8 million, \$7.5 million and \$4.5 million, respectively.

#### RESEARCH AND DEVELOPMENT

During 1989, 1988 and 1987, the Company conducted marketing and metallurgical research on the Thor Lake Joint Venture and additionally conducted research at the Apex Project in 1988. Research and development expenditures for the three years ended December 31, 1989, 1988 and 1987 were \$0.4 million, \$2.7 million and \$1.3 million, respectively.



## Thor Lake - Northwest Territories, Canada

A definitive joint venture agreement between the Company and Highwood Resources Ltd. (Highwood) of Toronto, Canada was announced in September 1986 to determine the economic feasibility of developing the Thor Lake specialty metal deposit. The agreement called for the Company to complete detailed feasibility and marketing studies by February 1988, which time was further extended to February 1990. In February 1990, the Company terminated the agreement with Highwood based on the results of feasibility and marketing studies.

## INDUSTRY SEGMENTS

Financial information with respect to industry segments is set forth in Note 10 of Notes to the Consolidated Financial Statements on page F-18 of this report.

## COMPETITION

The Company is engaged in the mining and processing of gold, silver (of which the Company is one of the leading producers in the United States), other nonferrous metals, specialty metals and industrial minerals in the United States and Canada. The Company encounters strong competition from other mining companies in connection with the acquisition of properties producing, or capable of producing, silver and gold. The Company also competes with other mining companies in connection with the recruiting and retention of qualified employees knowledgeable in underground mining operations. Silver and gold are worldwide commodities and, accordingly, the Company sells its production at world market prices. The table below reflects the volatility of silver and gold prices.

Year	Average Metal Prices	
	Silver (\$ per oz-Handy & Harman)	Gold (\$ per oz-London Final)
1989	\$ 5.50	\$ 381
1988	6.53	437
1987	7.01	446
1986	5.47	368
1985	6.14	317

The Company cannot compare sales from its ball clay mining operations with sales of other ball clay producers because the principal competitors are either family-owned or divisions of larger, diversified companies, but believes that it is the largest producer of ball clay in the United States. With the acquisition of kaolin assets from Cyprus Minerals Company in 1989 referred to above, the Company has also become an important producer in the United States of ceramic-grade kaolin. The principal competitors of the Company in the ball clay industry are H. C. Spinks Clay Company, Watts Blake Bearne & Co, and Old Hickory Clay Company. The principal competitors of the Company in the kaolin industry, are Albion Kaolin Company, Evans Clay Company and JM Huber Corporation.

The Company competes with other miners of scoria and with manufacturers of ceramic briquettes in the production and sale of briquettes. The Company has no information as to the size of the barbecue briquette industry but believes that it supplies a major portion of the scoria briquettes used in



gas barbecue grills. Price and natural product characteristics, such as color, uniformity of size, lack of trapped moisture and density, are important competitive considerations. The Company believes that it has a significant portion of the landscape scoria market east of the Continental Divide, with the balance of the market served principally by two companies, Big Chief Stone, Las Cruces and Santa Fe, New Mexico, and Twin Mountain Rock Co., Des Moines, New Mexico.

The Company will compete with other producers and refiners of germanium and gallium worldwide. The Company has no information as to the size of the germanium and gallium industries as the principal competitors are privately owned or are divisions of larger, diversified publicly owned companies. Major sources of germanium are zinc and aluminum refinery residues. The major European primary refiners of germanium are Metallurgie-Hoboken Overpelt SA, MetalEurop and Otavi Minen AG. Eagle-Picher Industries and Cabot Corporation are the only primary refiners of germanium in the United States. Major producers and refiners of gallium are Rhone Poulenc, Ingal, Sumitomo Metal Mining Co., Cominco Electronic Materials Inc. and Eagle-Picher Industries. The Company will also compete with suppliers of germanium and gallium from China, the USSR and eastern European countries.

With respect to the acquisition of mineral interests and exploration activities, which in terms of continuing growth and success may be the most important area of the Company's activities, the Company competes with numerous persons and with companies, many of which are substantially larger than the Company and have considerably greater resources.

#### ENVIRONMENTAL REGULATION

The mining operations of the Company are subject to inspection and regulation by the Mine Safety and Health Administration of the Department of Labor (MSHA) under provisions of the Federal Mine Safety and Health Act of 1977. It is the Company's policy to comply with the directives and regulations of MSHA. In addition, the Company takes such necessary actions as, in its judgment, are required to provide for the safety and health of its employees. MSHA directives have had no material adverse impact on the Company's operations, and the Company believes that it is substantially in compliance with the regulations promulgated by MSHA.

The Company's operations are also subject to regulation under various federal and state environmental control provisions. The most significant of these laws deal with mined land reclamation, waste water discharges and solid wastes from mines, mills, and further processing operations. The Company does not believe that these laws and regulations now in effect have a direct material adverse effect on its operations; however, charges of the smelters to which the Company sells its metallic concentrates and products have substantially increased over a period of years because of requirements that smelters meet environmental quality standards.

While the Company believes that it is in substantial compliance with current applicable environmental regulations, changes in federal and state regulatory policies may, at some future date, impose additional costs and operating requirements upon the Company. In addition, the future development of other Company holdings may require the acquisition of permits from various governmental agencies. The effect of such future changes in federal and state regulatory policies and the effect of a failure to obtain permits on the Company's exploration and development activities cannot be estimated.



Smelters are also subject to environmental protection laws and regulations. The Company has no control over the smelters' operations or their compliance with environmental laws and regulations. If the smelting capacity of the United States were significantly further reduced because of environmental requirements, it is possible that the Company's operations could be adversely affected.

#### EMPLOYEES

As of December 31, 1989, the Company and its subsidiaries employed 907 persons.

#### Item 2. Properties

The Company's principal mineral properties are described in Item 1 above. The Company also holds other mineral properties in the United States and Canada. Although some of such properties are known to contain significant quantities of mineralization, they are not considered material to the Company's operations at the present time. Encouraging results from further exploration or increases in the market prices of certain metals could in the future make such properties considerably more important to the business of the Company taken as a whole.

The general corporate office of the Company is located in Coeur d'Alene, Idaho on a tract of land containing approximately 15 acres. The Company also owns and plans to subdivide and sell approximately 90 adjacent acres.

The general offices of the Company's ball clay and kaolin mining operations are located five miles southwest of Mayfield, Kentucky. There is also a building consisting of 3,000 square feet at the Mayfield plant used as a laboratory for the purpose of testing clays and the development of various uses therefor. In addition, the Company owns approximately 1,600 acres of land principally for use in connection with milling and storage operations and in some instances as buffer or dumping land for clay properties.

The general offices of the scoria operations are located in Alamosa, Colorado. The Company owns a parcel of land of approximately 20 acres in the vicinity of Blanca, Colorado on which are located building, storage and shipping facilities utilized in its scoria business, and a bagging plant for landscape scoria. An additional bagging facility, utilized for scoria briquettes, is located at the Mesita Mine in Mesita, Colorado.

The map on page 24 shows the location of various Company properties.

#### Item 3. Legal Proceedings

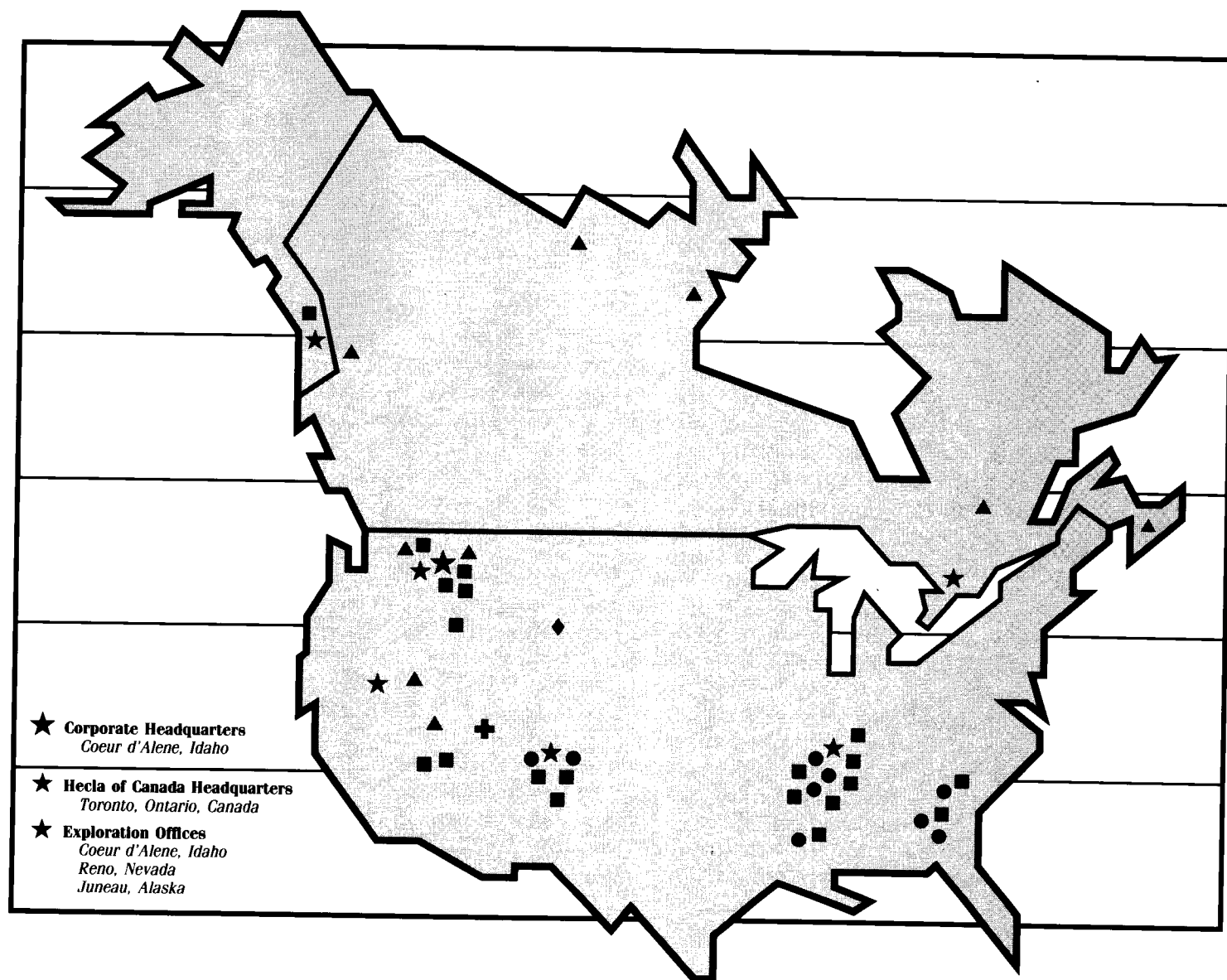
See Note 7 of the Notes to Consolidated Financial Statements on page F-14 of this report and disclosures on uranium mill tailings processing on pages 19 and 20, and environmental regulations on pages 22 and 23.

#### Item 4. Submission of Matters to a Vote of Security Holders

Not applicable.



# HECLA MINING COMPANY AND SUBSIDIARIES



★ **Corporate Headquarters**  
Coeur d'Alene, Idaho

★ **Hecla of Canada Headquarters**  
Toronto, Ontario, Canada

★ **Exploration Offices**  
Coeur d'Alene, Idaho  
Reno, Nevada  
Juneau, Alaska

## Precious Metals

### ■ Mines

Republic (Gold, Silver)  
Republic, Washington  
Lucky Friday (Silver, Lead)  
Mullan, Idaho  
Greens Creek (Silver, Gold,  
Zinc, Lead)\*  
Admiralty Island, Alaska  
Escalante (Silver)  
Cedar City, Utah  
Galena (Silver)\*  
Wallace, Idaho  
Coeur (Silver)\*  
Osburn, Idaho  
Yellow Pine (Gold, Antimony)  
Yellow Pine, Idaho

✚ **Mines on Care and Maintenance**  
Lisbon Valley (Uranium)\*  
Moab, Utah

### ▲ Exploration/Development Projects

Caladay (Silver)\*  
Wallace, Idaho  
Sulphurets (Gold, Silver)\*  
Stewart, British Columbia  
Mooseland (Gold)\*  
Mooseland, Nova Scotia  
Republic Area (Gold, Silver)  
Ferry County, Washington  
Baxter Property (Gold)\*  
Carlin Trend, Northeast Nevada  
Trout Creek (Gold)\*  
Humboldt County, Nevada  
Meadowbank (Gold)\*  
Baker Lake, Northwest Territories  
Mackenzie Property (Gold)\*  
Contwoyto Lake, Northwest Territories  
North Gold Zone (Gold)  
Casa-Berardi, Quebec

## Industrial Minerals

★ **Kentucky-Tennessee Clay  
Company Headquarters**  
Mayfield, Kentucky

### ● Plant/Mill Sites

Mayfield, Kentucky  
Crenshaw, Mississippi  
Gleason, Tennessee  
Whitlock, Tennessee  
Sandersville, Georgia  
Deepstep, Georgia  
Aiken, South Carolina

### ■ Ball Clay Mines

Carlisle County, Kentucky  
Mayfield, Kentucky  
Crenshaw, Mississippi  
Bradford, Tennessee  
Weakley County, Tennessee  
Carroll County, Tennessee  
Henry County, Tennessee

### ■ Kaolin Mines

Washington County, Georgia  
Aiken, South Carolina

★ **Colorado Aggregate  
Company Headquarters**  
Alamosa, Colorado

● **Plant/Mill Sites**  
Blanca, Colorado  
Mesita, Colorado

### ■ Scoria Mines

Mesita, Colorado  
Antonito, Colorado  
Taos County, New Mexico

## Specialty Metals

### ■ Mines

Apex (Germanium, Gallium,  
Copper)  
St. George, Utah

### ◆ Exploration Properties

Warren Peaks (Rare Earth  
Elements)  
Sundance, Wyoming

\*Indicates partial ownership or joint-  
venture project



Executive Officers of the Registrant

The following list is included as an unnumbered Item in Part I of this Report in lieu of being included in the Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on May 4, 1990.

<u>Name</u>	<u>Age at May 4, 1990</u>	<u>Position and Term Served</u>
Arthur Brown	49	Chairman and Chief Executive Officer since May 1987; President and Chief Operating Officer from May 1986; Executive Vice President from May 1985 to May 1986; Senior Vice President from May 1983 to May 1985. From May 1980 to May 1983, Vice President - Operations, and prior thereto, held various administrative positions with the Company; employed by the Company since 1967.
William J. Grismer	61	Senior Vice President since May 1985; Vice President - Finance from 1973 to May 1985; Secretary-Treasurer from 1965 to November 1981, Secretary since 1964.
Joseph T. Heatherly	59	Vice President - Controller since May 1989; Controller from May 1987 to May 1989; various administrative functions with the Company since May 1983.
Roger A. Kauffman	46	Vice President - Industrial Minerals since May 1986; Manager of Industrial Minerals and New Mine Development from 1984 to May 1986. From 1976 to 1984, various administrative positions with Ranchers Exploration and Development Corporation, and from 1970 to 1976, various staff engineering positions with Exxon Company, U.S.A.
Ralph R. Noyes	42	Vice President - Metal Mining since May 1988; Manager Metal Mining from June 1987 to May 1988; prior thereto, since 1976, held various administrative positions with the Company and Day Mines, Inc.
Robert H. Wallace	58	Vice President - Treasurer from May 1987. Vice President - Controller from November 1981 to May 1987. From 1974 to November 1981, Vice President - Finance and Treasurer of Day Mines, Inc. and from 1973 to 1974, Treasurer-Comptroller of Day Mines, Inc.
W. Glen Zinn	49	Vice President - Assistant to the Chairman since May 1988; Assistant to the President since April 1986; and from 1971 to 1986 held various administrative positions with Molycorp, Inc.

There are no family relationships between any of the executive officers.



PART II

Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters

- (a) (i) Shares of the Common Stock, par value \$.25 per share of the Company (the "Common Stock"), are traded on the New York Stock Exchange, New York, New York, and the Pacific Stock Exchange, San Francisco and Los Angeles, California.
- (ii) The price range of the Common Stock on the New York Stock Exchange for the past two years was as follows:

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
1989 - High	\$ 14.75	\$ 13.50	\$ 15.13	\$ 16.13
- Low	12.38	11.50	12.50	12.25
1988 - High	15.13	16.38	17.88	15.25
- Low	11.75	12.25	13.75	12.25

- (b) As of December 31, 1989, there were 15,698 holders of record of the Common Stock.
- (c) The Company paid cash dividends of \$.05 per share of Common Stock during the fourth quarters of 1989 and 1988. The amount and frequency of cash dividends is significantly influenced by metal prices, operating results and the Company's cash requirements.



Item 6. Selected Financial Data  
(in thousands except for per-share information)

	Years Ended December 31				
	1989	1988	1987	1986	1985
Total revenue	\$ 101,714	\$ 105,356	\$ 88,716	\$ 62,057	\$ 81,125
Income (loss) from continuing operations before cumulative effect of change in accounting principle	\$ (22,395)	\$ 16,602	\$ 10,336	\$ (21,232)	\$ (8,918)
Income from discontinued operation	- -	- -	- -	- -	4,694
Cumulative effect of change in accounting for income taxes	- -	(1,473)	- -	- -	- -
Net income (loss)	\$ (22,395)	\$ 15,129	\$ 10,336	\$ (21,232)	\$ (4,224)
* Income (loss) per share of common stock from continuing operations before cumulative effect of change in accounting for income taxes	\$(0.83)	\$ 0.61	\$ 0.38	\$(0.79)	\$(0.33)
Net income (loss) per share of common stock	\$(0.83)	\$ 0.56	\$ 0.38	\$(0.79)	\$(0.16)
Total assets	\$ 222,198	\$ 188,852	\$ 170,716	\$ 140,281	\$ 170,932
Long-term debt - Notes and contracts payable	\$ 65,020 <sup>(1)</sup>	\$ 17,332 <sup>(1)</sup>	\$ 10,399 <sup>(1)</sup>	\$ 516 <sup>(2)</sup>	\$ 562 <sup>(2)</sup>
Dividends - Per share of common stock	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.20
Shares of Common Stock issued	27,062,101	27,044,812	27,040,832	26,993,738	26,993,738
Shareholders of record	15,698	16,766	17,795	19,749	20,708
Employees	907	737	795	653	945

(1) Includes \$260,000, \$332,000 and \$399,000 for 1989, 1988 and 1987, respectively, of long-term debt which is recorded in other noncurrent liabilities.

(2) Long-term debt is included in other noncurrent liabilities in 1986 and 1985.



Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

1989 versus 1988

The net loss for 1989 was \$22.4 million, or \$.83 per share, compared to net income for 1988 of \$15.1 million, or \$.56 per share.

Sales of products decreased by \$2.9 million or 3% from 1988 to 1989, principally as a result of lower average gold and silver prices in 1989 compared to 1988, the suspension of production at the Yellow Pine gold mine during 1989, decreased gold production at the Republic mine and decreased silver production at the Escalante mine, partially offset by increased silver production at the Lucky Friday mine and the Greens Creek mine, which commenced production in the first quarter of 1989. The average price per ounce of gold and silver decreased from \$437 and \$6.53 in 1988 to \$381 and \$5.50, respectively, in 1989. The industrial minerals segment sales increased from 1988 to 1989 primarily as a result of sales from Kentucky-Tennessee Clay Company's kaolin operation (acquired from Cyprus Minerals Company on February 17, 1989), partially offset by decreased sales tonnages of ball clay and a decrease in the average selling price of scoria in 1989 compared to 1988.

Cost of sales and other direct production costs and depreciation, depletion and amortization increased by \$13.8 million and \$6.0 million, respectively, from 1988 to 1989, principally as a result of (1) the commencement of operations at the Greens Creek mine; (2) the addition of Kentucky-Tennessee Clay Company's kaolin operations; (3) increased production at the Lucky Friday mine; and (4) write-down of inventories to net realizable value, additional depreciation, depletion and amortization costs and accrual of closure costs at the Escalante mine; all of which were partially offset by decreased mining expenditures at the Yellow Pine mine due to suspended operations during 1989.

Other operating expenses increased by \$1.9 million or 10% from 1988 to 1989. General and administrative costs decreased by \$.5 million from 1988 to 1989 principally due to a special payment made to certain Company employees in 1988 who were subject to the salary rollback during the 1986-1987 period, and the implementation of an early retirement program in 1988. Exploration costs increased from \$7.5 million in 1988 to \$8.8 million in 1989 primarily as a result of increased Canadian exploration activity. Research expenses decreased by \$2.3 million from \$2.7 million in 1988 to \$.4 million in 1989, principally due to decreased marketing and metallurgical research activities associated with the Thor Lake Joint Venture and the Apex Project during 1989. In 1989 the Company recorded noncash write-downs totalling \$3.3 million relating principally to the carrying values of inactive mining properties. The major portion of the write-down related to the write-off of the Company's interests in certain properties, located in Colorado, which were acquired as part of the 1984 merger with Ranchers Exploration and Development Corporation. These properties were used by Ranchers in connection with reprocessing uranium mill tailings. The principal reason for the write-down was the reversal in 1989 of a prior court ruling which would have resulted in the Company being compensated for condemnation costs associated with the Colorado properties.



Interest and other income decreased from \$3.1 million in 1988 to \$2.3 million in 1989, principally due to a nonrecurring gain on sale of property, plant and equipment in 1988, partially offset by increased interest income from the invested excess available cash from the long-term debt placement. Other expense increased by \$1.6 million primarily as a result of the 1989 settlement of a lawsuit resulting from operations conducted by the Company's predecessor in interest, Ranchers Exploration and Development Corporation, at an Arizona mine site. During the fourth quarter of 1989, the Company sold 952,900 shares of Sunshine Mining Company (Sunshine) common stock for \$3.6 million, realizing a loss of approximately \$4,848,000. With the Company's decision to liquidate its holdings in Sunshine common stock, the Company transferred this investment to a current asset classification and recognized a loss of \$4,233,000 for the difference between the market value and the underlying cost of the remaining 748,100 Sunshine common shares held at December 31, 1989. Interest costs increased from \$1.8 million in 1988 to \$4.7 million in 1989 principally due to increased borrowings to finance the Company's acquisition of Cyprus' kaolin operations, the Apex mine and processing facilities, and the Company's share of preproduction costs and working capital requirements at the Greens Creek mine. Interest costs capitalized decreased by \$.3 million from 1988 to 1989, principally because interest costs associated with the Greens Creek borrowings are no longer capitalized as the project commenced operations in the first quarter of 1989.

Income taxes reflect a net benefit of \$3.5 million in 1989 compared to a net benefit of \$3.1 million in 1988. The income tax benefit in 1989 is principally due to the reduction of temporary differences subject to the alternative minimum tax.

#### Results of Operations

##### 1988 versus 1987

Net income for 1988 was \$15.1 million, or \$.56 per share, compared to net income of \$10.3 million, or \$.38 per share, for 1987.

Sales of products increased by \$15.2 million or 17% from 1987 to 1988, principally as a result of the commencement of gold production at the Yellow Pine Unit in 1988, increased gold production at the Republic Unit, and increased silver and lead production at the Lucky Friday mine which had suspended commercial production from April 11, 1986 to June 1, 1987. This increased production was partially offset by decreases in the average price per ounce of gold and silver from \$446 and \$7.01 in 1987 to \$437 and \$6.53, respectively, in 1988. Additionally, the industrial minerals segment increased both sales tonnage and the average selling price in 1988 compared to 1987.

Cost of sales and other direct production costs and depreciation, depletion and amortization increased by \$11.2 million and \$1.3 million from 1987 to 1988, respectively, principally as a result of the commencement of gold operations at the Yellow Pine Unit and increased production at the Lucky Friday mine. Cost of sales and other direct production costs of the industrial minerals operations increased moderately from 1987 to 1988, also primarily as a result of increased production.



Other operating expenses increased by \$4.6 million or 32% from 1987 to 1988. General and administrative costs increased by \$.4 million from 1987 to 1988, principally due to (1) a special payment made to certain Company employees in 1988 who were subject to the salary rollback during the 1986-1987 period, along with increased labor costs associated with the salary and wage rollback being rescinded effective September 1, 1987; (2) implementation of an early retirement program in 1988; and (3) increased expenditures on gold and silver promotional activities; all of which were partially offset by a \$1.2 million decrease in the amounts charged to expense in 1987 in connection with the stock option plans. Exploration costs increased from \$4.5 million in 1987 to \$7.5 million in 1988, primarily as a result of increased exploration activity in the precious metals segment, the industrial minerals segment and various Canadian exploration projects. Research expenses increased by \$1.4 million from \$1.3 million in 1987 to \$2.7 million in 1988, principally due to increased marketing and metallurgical research activities associated with the Thor Lake Joint Venture and the Apex Project during 1988.

Interest and other income increased by \$1.5 million from 1987 to 1988 primarily as a result of the gain on the sale of property, plant and equipment, principally from the Victoria, Nevada, property, and a Coeur d'Alene, Idaho, land sale in 1988. Other expense decreased from \$.4 million in 1987 to \$.1 million in 1988 as a result of decreased costs associated with the corporate relocation from Wallace, Idaho, to Coeur d'Alene, Idaho. During 1987 a loss of \$.9 million on sale of investments in common stock was incurred. There were no sales of investments during 1988. Interest costs and interest capitalized each increased by \$.7 million from 1987 to 1988, primarily as a result of increased borrowings to finance the Company's share of the Greens Creek Joint Venture preproduction costs.

Income taxes reflect a net benefit of \$3.1 million in 1988 compared to a provision of \$2.4 million in 1987. The income tax benefit in 1988 is principally due to the Company reevaluating its prior accruals for potential income tax deficiencies for its federal and state tax returns currently under audit or subject to audit, and reducing its previously stated income tax liability by \$6,075,000. As further described in Notes 1 and 5 of Notes to Consolidated Financial Statements, the Company prospectively adopted Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes, effective January 1, 1988. The effect of this change, which is reported as the cumulative effect of the change in accounting for income taxes, was to decrease net income by \$1.5 million or \$.05 per share.

#### Financial Condition and Liquidity

At the end of 1989, assets totalled approximately \$222.2 million and shareholders' equity \$129.2 million. Cash and cash equivalents increased by \$12.8 million to \$13.1 million at the end of 1989 from \$.3 million at the end of 1988. The major sources of cash in 1989 were \$7.3 million from operating activities, \$42.8 million from net long-term debt borrowings, and \$4.1 million of proceeds from the sales of marketable equity securities.

The \$40.6 million increase in properties, plants and equipment was primarily due to the Company's acquisition of the Cyprus Minerals Company's kaolin assets, the acquisition of the Apex mine and processing facilities and subsequent preproduction and plant construction costs, Hecla's 28% share of the Greens Creek preproduction, development and plant construction costs, and construction of the Yellow Pine mine permanent heap leach project. These uses of cash were initially funded under the Company's revolving credit term loan agreement. During the second quarter of 1989, the Company issued subordinated zero coupon convertible notes, due June 14, 2004, with



a face value at maturity of \$201,250,000 as further described in Note 6 of Notes to Consolidated Financial Statements. The Company used the net proceeds of approximately \$60 million to repay \$40 million of outstanding borrowings under the Company's \$75 million revolving credit term loan agreement and invested the remainder of the proceeds in cash equivalents to be used for general corporate purposes. Planned capital expenditures for 1990 are expected to be approximately \$13.3 million, principally for the accelerated development program at the Republic Unit and ongoing capital requirements of the industrial minerals segment. These expenditures are expected to be funded through internally generated funds and existing cash equivalents. Internally generated funds, existing cash equivalents and the bank credit line are considered adequate to fund the Company's known requirements, both current and long-term. While the Company's long-term objective could result in a need for additional financing, the Company believes that in the existing economic environment it will be able to secure any additional funding that may be required.

The Company's share of planned gold production for 1990 is approximately 150,000 ounces compared to actual 1989 gold production of 82,586 ounces. The expected increase in gold production is primarily due to the planned resumption of commercial operations at the Company's wholly owned Yellow Pine Unit. The Company's share of planned silver production for 1990 is approximately 6.2 million ounces compared to actual 1989 silver production of 5.8 million ounces. The planned increase in silver production is due primarily to an anticipated full year of commercial operation at the Greens Creek mine partially offset by decreased production from the Escalante mine scheduled to cease commercial operations in mid-year 1990. The Company's planned industrial minerals production is expected to increase in 1990 compared to 1989 principally due to additional production from Kentucky-Tennessee Clay Company's kaolin operations which were acquired in February 1989.

As further described in Note 7 of Notes to Consolidated Financial Statements, the Company has been notified by the United States Environmental Protection Agency (EPA) that it has been designated by the EPA as a potentially responsible party with respect to three superfund sites. Although the ultimate disposition of these and various other pending legal actions and claims is not presently determinable, it is the opinion of the Company's management, based upon the information available at this time, that the outcome of these suits and proceedings will not have a material adverse effect on the financial condition of the Company and its consolidated subsidiaries.

A substantial portion of the Company's revenues are derived from the sale of commodities, the prices of which are subject to worldwide supply and demand. The Company cannot significantly affect the market prices for these products. Prices may change dramatically in short periods of time and such price changes have a significant effect on revenues and profits of the Company. The Company has experienced increased costs because of inflation, but the costs of production remain relatively unchanged over the short-term although they are generally subject to the same inflationary pressures experienced by the entire economy. In addition, inflation has affected, and will continue to affect, the interest rates paid by the Company, the effect of which on the Company's profitability will vary with the amount of the Company's borrowing at any time. However, the market prices for products produced by the Company have a much greater impact than inflation on the Company's revenues and profitability.



The discovery, development and acquisition of mineral properties are in many instances unpredictable events. Future metal prices, the success of exploration programs and other property transactions can have a significant impact on the need for capital. One of the primary reasons for the maintenance of the bank credit line is to have funds readily available to allow the Company flexibility in structuring mineral acquisitions or ventures. The Company believes it has the flexibility to adjust its activities to cope with changing economic conditions.

Item 8. Financial Statements and Supplementary Data

See Item 14 of this Report for information with respect to the financial statements filed as a part hereof, including financial statements filed pursuant to the requirements of this Item 8.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant

Reference is made to the information with respect to the directors of the Company set forth under the caption "Election of Directors" in the Company's proxy statement for the annual meeting scheduled to be held on May 4, 1990 (the "Proxy Statement"), which information is incorporated herein by reference. Information with respect to executive officers of the Company is set forth in Part I hereof.

Item 11. Executive Compensation

Reference is made to the information set forth under the caption "Compensation of Executive Officers" in the Proxy Statement, which information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management

Reference is made to the information set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement, which information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions

Reference is made to the information set forth under the caption "Other Transactions" in the Proxy Statement, which information is incorporated herein by reference.



PART IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a)(1) Financial Statements

See Index to Financial Statements on Page F-1

(a)(2) Financial Statement Schedules

See Index to Financial Statements on Page F-1

(a)(3) Exhibits

See Exhibit Index following Page F-27

(b) Reports on Form 8-K

There were no reports on Form 8-K for the three months ended December 31, 1989.



## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 19, 1990.

HECLA MINING COMPANY

By /s/ Arthur Brown  
Arthur Brown, Chairman

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ Arthur Brown 3/19/90  
 Arthur Brown Date  
 Chairman and Director  
 (principal executive officer)

/s/ Wm. A. Griffith 3/19/90  
William A. Griffith Date  
Director

/s/ William J. Grismer      3/19/90  
 William J. Grismer      Date  
 Senior Vice President and Secretary  
 (principal financial officer)

/s/ Robert S. Jepson, Jr. 3/19/90  
Robert S. Jepson, Jr.                      Date  
Director

/s/ J. T. Heatherly                      3/19/90  
Joseph T. Heatherly                      Date  
Vice President - Controller  
(principal accounting officer)

/s/ Charles L. McAlpine 3/19/90  
Charles L. McAlpine Date  
Director

John E. Clute  
Director

3/19/90  
Date

/s/ Paul A. Redmond 3/19/90  
Paul A. Redmond Date  
Director

/s/ Leland O. Erdahl 3/19/90  
Leland O. Erdahl Date  
Director

/s/ Richard J. Stoehr 3/19/90  
Richard J. Stoehr Date  
Director

3/19/90  
Norman Visnes  
Director



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Consolidated Statements of Operations for the Years Ended December 31, 1989, 1988 and 1987	F-4
Consolidated Statements of Cash Flows for the Years Ended December 31, 1989, 1988 and 1987	F-5
Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 1989, 1988 and 1987	F-6
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## Financial Statement Schedules\*

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\*Other financial statement schedules  
have been omitted as not applicable



**INDEPENDENT AUDITOR'S REPORT**

The Board of Directors  
and Shareholders  
Hecla Mining Company

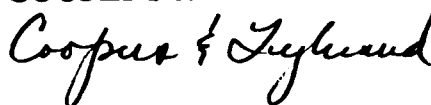
We have audited the accompanying consolidated balance sheets of Hecla Mining Company and consolidated subsidiaries as of December 31, 1989 and 1988, and the related consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 1989. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Hecla Mining Company and consolidated subsidiaries as of December 31, 1989 and 1988, and the results of their operations and cash flows for each of the three years in the period ended December 31, 1989 in conformity with generally accepted accounting principles.

As discussed in Note 5 to the consolidated financial statements, the Company changed its method of accounting for income taxes in 1988 as required by a Statement of Financial Accounting Standards issued by the Financial Accounting Standards Board.

COOPERS & LYBRAND



Spokane, Washington  
February 2, 1990

## HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS  
(dollars in thousands)

## ASSETS

	December 31,	
	1989	1988
Current assets:		
Cash and cash equivalents	\$ 13,086	\$ 319
Accounts and notes receivable	17,487	15,083
Inventories (Note 2)	14,486	14,048
Investments (Note 3)	2,431	- -
Other current assets	1,661	534
Total current assets	49,151	29,984
Investments (Note 3)	10,269	15,915
Properties, plants and equipment, net (Note 4)	155,859	135,707
Other noncurrent assets	6,919	7,246
Total assets	\$ 222,198	\$ 188,852

## LIABILITIES

Current liabilities:		
Accounts payable and accrued expenses	\$ 9,853	\$ 6,398
Accrued payroll	2,397	1,715
Accrued taxes	1,361	1,486
Deferred income taxes (Note 5)	761	2,310
Total current liabilities	14,372	11,909
Notes payable to banks (Note 6)	- -	17,000
Deferred income taxes (Note 5)	3,742	9,284
Deferred revenue	2,525	2,718
Long-term debt (Note 6)	64,760	- -
Other noncurrent liabilities	7,563	5,081
Total liabilities	92,962	45,992

Commitments and contingencies (Note 7)

## SHAREHOLDERS' EQUITY

Preferred stock, 25¢ par value, authorized 5,000,000 shares, none issued (Note 9)		
Common stock, 25¢ par value, authorized 50,000,000 shares; issued 1989 - 27,062,101, 1988 - 27,044,812 (Note 9)	6,766	6,761
Capital surplus	53,600	53,326
Earnings retained in the business	70,326	94,071
Net unrealized loss on marketable equity securities (Note 3)	(635)	(10,687)
Less common stock reacquired, at cost; 1989 - 54,618 shares, 1988 - 40,999 shares	(821)	(611)
Total shareholders' equity	129,236	142,860
Total liabilities and shareholders' equity	\$ 222,198	\$ 188,852

The accompanying notes are an integral part of the financial statements.



## HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF OPERATIONS

(dollars and shares in thousands, except for per-share amounts)

	Year Ended December 31,		
	1989	1988	1987
Sales of products	\$ 99,391	\$ 102,303	\$ 87,146
Cost of sales and other direct production costs	74,791	60,966	49,759
Depreciation, depletion and amortization	17,530	11,511	10,210
	<u>92,321</u>	<u>72,477</u>	<u>59,969</u>
Gross profit	<u>7,070</u>	<u>29,826</u>	<u>27,177</u>
Other operating expenses:			
General and administrative	7,727	8,229	7,795
Exploration	8,816	7,504	4,520
Research	444	2,732	1,321
Depreciation and amortization	497	435	677
Reduction in carrying value of mining properties (Note 4)	3,308	-	-
	<u>20,792</u>	<u>18,900</u>	<u>14,313</u>
Earnings (loss) from operations	<u>(13,722)</u>	<u>10,926</u>	<u>12,864</u>
Other income (expense):			
Interest and other income	2,323	3,053	1,570
Other expense	(1,633)	(52)	(425)
Loss on investments (Note 3)	(9,140)	-	(883)
Interest expense:			
Total interest cost	(4,732)	(1,807)	(1,101)
Less amount capitalized	1,040	1,371	668
	<u>(12,142)</u>	<u>2,565</u>	<u>(171)</u>
Income (loss) before income taxes and cumulative effect of change in accounting principle	(25,864)	13,491	12,693
Income tax provision (benefit) (Note 5)	<u>(3,469)</u>	<u>(3,111)</u>	<u>2,357</u>
Income (loss) before cumulative effect of change in accounting principle	(22,395)	16,602	10,336
Cumulative effect of change in accounting for income taxes (Note 5)	-	(1,473)	-
Net income (loss)	<u>\$ (22,395)</u>	<u>\$ 15,129</u>	<u>\$ 10,336</u>
Net income (loss) per share:			
Income (loss) before cumulative effect of change in accounting principle	\$ (0.83)	\$ 0.61	\$ 0.38
Cumulative effect of change in accounting for income taxes	-	(0.05)	-
	<u>\$ (0.83)</u>	<u>\$ 0.56</u>	<u>\$ 0.38</u>
Cash dividends per share	<u>\$ 0.05</u>	<u>\$ 0.05</u>	<u>\$ 0.05</u>
Weighted average number of common shares outstanding	<u>27,005</u>	<u>27,003</u>	<u>26,990</u>

The accompanying notes are an integral part of the financial statements.

## HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS  
(dollars in thousands)

	Year Ended December 31,		
	1989	1988	1987
Operating activities:			
Net income (loss)	\$ (22,395)	\$ 15,129	\$ 10,336
Noncash elements included in net income (loss):			
Depreciation, depletion and amortization	18,027	11,946	10,887
Income tax benefit	(3,676)	(6,456)	-
Gain on disposition of properties, plants and equipment	(112)	(2,541)	(794)
Loss on investments	9,140	-	883
Interest on long-term debt	2,711	-	-
Reduction in carrying value of mining properties	3,308	-	-
Provision for closure costs	513	-	-
Cumulative effect of change in accounting for income taxes	-	1,473	-
Reduction of inventories to net realizable value	1,085	-	-
	<u>8,601</u>	<u>19,551</u>	<u>21,312</u>
Change in accounts and notes receivable	(2,905)	577	(7,388)
Change in inventories	(1,523)	(1,809)	604
Change in other current assets	(1,127)	709	(570)
Change in accounts payable and accrued expenses	3,624	(48)	2,473
Change in accrued taxes	(125)	(135)	756
Change in noncurrent liabilities	<u>770</u>	<u>320</u>	<u>(285)</u>
Net cash provided by operating activities	<u>7,315</u>	<u>19,165</u>	<u>16,902</u>
Investing activities:			
Purchase of investments	(418)	(5,102)	(530)
Proceeds from sale of investments	4,078	-	6,795
Additions to properties, plants and equipment	(40,602)	(25,950)	(32,325)
Proceeds from disposition of properties, plants and equipment	778	2,067	1,975
Other, net	<u>277</u>	<u>387</u>	<u>123</u>
Net cash applied to investing activities	<u>(35,887)</u>	<u>(28,598)</u>	<u>(23,962)</u>
Financing activities:			
Proceeds from bank borrowings	40,000	27,000	31,500
Repayment of bank borrowings	(57,000)	(20,000)	(21,500)
Reduction in deferred revenue	(193)	(214)	(281)
Proceeds from issuance of long-term debt	59,813	-	-
Common stock issued under stock option plan	279	41	987
Acquisition of treasury stock	(210)	(40)	(312)
Dividends declared and paid	<u>(1,350)</u>	<u>(1,350)</u>	<u>(1,350)</u>
Net cash provided by financing activities	<u>41,339</u>	<u>5,437</u>	<u>9,044</u>
Change in cash and cash equivalents:			
Net increase (decrease) in cash and cash equivalents	12,767	(3,996)	1,984
Cash and cash equivalents at beginning of year	<u>319</u>	<u>4,315</u>	<u>2,331</u>
Cash and cash equivalents at end of year	<u>\$ 13,086</u>	<u>\$ 319</u>	<u>\$ 4,315</u>
Supplemental disclosure of cash flow information:			
Cash paid during year for:			
Interest (net of amount capitalized)	<u>\$ 1,501</u>	<u>\$ 607</u>	<u>\$ 308</u>
Income taxes, net of refunds	<u>\$ 642</u>	<u>\$ 3,295</u>	<u>\$ 2,131</u>

See Note 4 for noncash investing activity.

The accompanying notes are an integral part of the financial statements.



HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

For the Years Ended December 31, 1989, 1988 and 1987  
(dollars and shares in thousands)

	<u>Common Stock</u>		<u>Capital</u>	<u>Earnings</u>	<u>Treasury</u>	<u>Net Unrealized Loss</u>
	<u>Shares</u>	<u>Amount</u>	<u>Surplus</u>	<u>Retained in</u>	<u>Stock</u>	<u>on Marketable</u>
				<u>the Business</u>		<u>Equity Securities</u>
Balances, December 31, 1986	26,994	\$ 6,748	\$ 52,311	\$ 71,306	\$ (259)	\$ (11,944)
Net income				10,336		
Cash dividends				(1,350)		
Net change in unrealized loss on marketable equity securities (Note 3)						3,469
Stock issued under stock option plans (Note 9)	47	12	975			
Acquisition of treasury stock					(312)	
Balances, December 31, 1987	27,041	6,760	53,286	80,292	(571)	(8,475)
Net income				15,129		
Cash dividends				(1,350)		
Net change in unrealized loss on marketable equity securities (Note 3)						(2,212)
Stock issued under stock option plans (Note 9)	4	1	40			
Acquisition of treasury stock					(40)	
Balances, December 31, 1988	27,045	6,761	53,326	94,071	(611)	(10,687)
Net (loss)				(22,395)		
Cash dividends				(1,350)		
Net change in unrealized loss on marketable equity securities (Note 3)						10,052
Stock issued under stock option plans (Note 9)	17	5	274			
Acquisition of treasury stock					(210)	
Balances, December 31, 1989	27,062	\$ 6,766	\$ 53,600	\$ 70,326	\$ (821)	\$ (635)

The accompanying notes are an integral part of the financial statements.

HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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Note 1: Summary of Significant Accounting Policies

a. Company's Business - Hecla and its wholly owned subsidiaries are engaged in mining and mineral processing. Sales of products are made principally to custom smelters and commodity dealers. Industrial minerals are sold principally to manufacturers and wholesalers. Sales to significant metal customers, as a percentage of sales of products, were as follows:

	<u>1989</u>	<u>1988</u>	<u>1987</u>
Custom smelter	39.1%	21.9%	14.1%
Custom metal traders:			
Customer A	30.0%	45.8%	36.8%
Customer B	23.4%	27.7%	15.5%

b. Basis of Consolidation - The consolidated financial statements include the accounts of the Company, its wholly owned subsidiaries and its proportionate share of the accounts of the joint ventures in which it participates. All significant intercompany transactions and accounts are eliminated.

c. Inventories - Inventories are stated at the lower of average cost or estimated net realizable value.

d. Investments - The Company follows the equity method of accounting for investments in common stock of operating companies 20% to 50% owned. Investments in nonoperating companies that are not intended for resale or are not readily marketable are valued at the lower of cost or net realizable value. The carrying value of marketable equity securities is based on the lower of cost or quoted market value. The cost of investments sold is determined by specific identification.

e. Properties, Plants and Equipment - Properties, plants and equipment are stated at cost. Maintenance, repairs and renewals are charged to operations. Betterments of a major nature are capitalized. When assets are retired or sold, the costs and related allowances for depreciation and amortization are eliminated from the accounts and any resulting gain or loss is reflected in operations. Idle facilities, placed on a standby basis, are carried at the lower of net book value or estimated net realizable value.

Management of the Company reviews the net carrying value of all facilities, including idle facilities, on a regular, periodic basis. These reviews consider, among other factors, (1) the net realizable value of each major type of asset, on a property-by-property basis, to reach a judgment concerning possible permanent impairment of value and any need for a



write-down in asset value, (2) the ability of the Company to fund all care, maintenance and standby costs, (3) the status and usage of the assets, while in a standby mode, to thereby determine whether some form of amortization is appropriate, and (4) current projections of metal prices that affect the decision to reopen or make a disposition of the assets.

Depreciation is computed using straight-line and declining-balance methods based on the estimated useful lives of the assets, and the unit-of-production method. Depletion is computed using the unit-of-production method.

f. Mine Exploration and Development - Exploration costs are charged to income as incurred, as are normal development costs at operating mines. Major mine development expenditures at operating properties and at new mining properties not yet producing are capitalized.

g. Reclamation of Mining Areas - Minimum standards for mine reclamation have been established by various governmental agencies which affect certain operations of the Company. A reserve for mine reclamation has been established for restoring certain abandoned and currently disturbed mining areas based upon estimates of cost to comply with existing reclamation standards.

h. Income Taxes - Effective January 1, 1988, the Company prospectively adopted Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes. The statement amends or supercedes most prior authoritative literature on the subject and requires, among other things, a change from the deferred to the liability method of computing deferred income taxes and current recognition of the effect of changes in statutory tax rates on previously provided deferred income taxes (see Note 5).

The benefits of investment tax credits are recognized on a flow-through basis in the year they are available to reduce the income tax provision.

i. Net Income (Loss) Per Share - Net income (loss) per share is based on the weighted average number of shares of common stock and common stock equivalents (stock options) outstanding during each reporting period unless the common stock equivalents are anti-dilutive. Due to the net loss in 1989, common stock equivalents are anti-dilutive and therefore have been excluded from the computation.

j. Revenue Recognition - Sales of metal products sold directly to smelters are recorded when they are received at the smelter, at estimated metal prices. Recorded values are adjusted periodically and upon final settlement. Metal in products tolled (rather than sold to smelters) is sold under contracts for future delivery; such sales are recorded at contractual amounts when products are available to be processed by the smelter or refinery. Sales of industrial minerals are recognized as the minerals are delivered.

k. Deferred Revenue - Deferred revenue includes income to be recognized on the sale of certain mineral properties. Revenue is recognized when cash proceeds exceed the Company's net book value of the assets sold and the collectibility of the remaining payments is assured.



l. Interest Expense - Interest costs incurred during the construction of qualifying assets are capitalized as part of the asset cost.

m. Cash Equivalents - The Company considers cash equivalents to consist of short-term, highly liquid investments which are readily convertible into cash.

n. Reclassifications - Certain prior years' consolidated financial statement amounts have been reclassified to conform to the 1989 presentation. These reclassifications had no effect on the net income (loss) or net earnings retained in the business as previously reported.

Note 2: Inventories

Inventories consist of the following (in thousands):

	December 31,	
	1989	1988
Concentrates and metals in transit and other products	\$ 6,509	\$ 7,379
Industrial minerals products	2,928	2,651
Materials and supplies	5,049	4,018
	<u>\$ 14,486</u>	<u>\$ 14,048</u>

Note 3: Investments

Investments consist of the following components (in thousands):

	Carrying Value	Cost	Market Value
<u>December 31, 1989</u>			
Current:			
Marketable equity securities	<u>\$ 2,431</u>	<u>\$ 2,431</u>	\$ 2,431
Noncurrent:			
Marketable equity securities	\$ 547	\$ 1,182	\$ 547
Other investments	9,722	9,722	
	<u>\$ 10,269</u>	<u>\$ 10,904</u>	
<u>December 31, 1988</u>			
Noncurrent:			
Marketable equity securities	\$ 6,613	\$ 17,300	\$ 6,613
Other investments	9,302	9,302	
	<u>\$ 15,915</u>	<u>\$ 26,602</u>	

At December 31, 1989, the portfolio of noncurrent, marketable equity securities includes gross unrealized gains of approximately \$90,000 and gross unrealized losses of approximately \$725,000. The other investments are principally large blocks of common and preferred stock in several mining companies, and investments in various mining ventures. These securities are generally restricted as to trading or marketability although some of the shares are frequently traded on the over-the-counter market in Spokane, Washington and certain Canadian exchanges.



During the fourth quarter of 1989, the Company sold 952,900 shares of Sunshine Mining Company (Sunshine) common stock for \$3.6 million, realizing a loss of approximately \$4,848,000. With the Company's decision to liquidate its holdings in Sunshine common stock, the Company transferred this investment to a current asset classification and recognized a loss of \$4,233,000 for the difference between the market value and the underlying cost of the remaining 748,100 common shares held at December 31, 1989.

Note 4: Properties, Plants and Equipment

The major components of properties, plants and equipment are (in thousands):

	December 31,	
	1989	1988
Mining properties	\$ 30,215	\$ 28,296
Deferred development costs	67,125	54,764
Plants and equipment	159,241	136,882
Land	5,450	5,475
	<u>262,031</u>	<u>225,417</u>
Less accumulated depreciation, depletion and amortization	<u>106,172</u>	<u>89,710</u>
	<u>\$ 155,859</u>	<u>\$ 135,707</u>

Based on its periodic reviews of the status of various mining properties and investments, the Company determined in 1989 that certain adjustments were appropriate to properly reflect the estimated net realizable values. The Company's 1989 write-down of approximately \$3.3 million related to the Company's interests in the Durita and Escalante properties. The write-down was principally as a result of the reversal of a court ruling which would have compensated the Company for condemnation costs associated with the Colorado properties. These interests were acquired as part of the merger with Ranchers Exploration and Development Corporation.

The net book values of the major mining properties of the Company that were on a standby or idle basis at December 31, 1989 and 1988 were approximately \$6,180,000 and \$7,754,000, respectively.

In June 1988, the Company sold a parcel of land for approximately \$2,200,000. As part of consideration received, the Company accepted a note receivable of approximately \$1,500,000.

Note 5: Income Taxes

As described in Note 1 of Notes to Consolidated Financial Statements, the Company prospectively adopted Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes, effective January 1, 1988. The effect of this change was to decrease net income by \$1,473,000, or \$.05 per share, for 1988, which is reported as the cumulative effect of the change in accounting for income taxes.



Major components of the Company's income tax provision (benefit) are (in thousands):

	<u>1989</u>	<u>1988</u>	<u>1987</u>
Current:			
Federal	\$ (16)	\$ 3,149	\$ 2,079
State	223	196	278
Revision of prior years' estimated taxes	<u>(209)</u>	<u>(6,075)</u>	<u>- -</u>
Total current	<u>(2)</u>	<u>(2,730)</u>	<u>2,357</u>
Deferred:			
Federal	(3,289)	(573)	- -
State	<u>(178)</u>	<u>192</u>	<u>- -</u>
Total deferred	<u>(3,467)</u>	<u>(381)</u>	<u>- -</u>
Income tax provision (benefit)	<u><u>\$ (3,469)</u></u>	<u><u>\$ (3,111)</u></u>	<u><u>\$ 2,357</u></u>

During 1989, as well as in 1988, as a result of certain revenue agents' reports and resolutions of certain disputes which were settled with the Appellate Division and through the Joint Committee on Taxation, the Company reevaluated its prior accruals for income taxes currently under or subject to audit and reduced its estimated income tax liability by \$209,000 in 1989 and by \$6,075,000 in 1988.

The deferred tax benefits for 1989 and 1988 are the results of changes in temporary differences between financial statement and income tax amounts as follows (in thousands):

	<u>1989</u>	<u>1988</u>
Depreciation, depletion, deferred development and exploration costs	\$ 1,050	\$ 469
Reclamation costs	285	83
Reduction in carrying values of mining properties	946	
Unrealized losses on marketable equity securities	1,187	
Investment tax credit		(191)
Other, net	<u>(1)</u>	<u>20</u>
	<u><u>\$ 3,467</u></u>	<u><u>\$ 381</u></u>



The annual tax provision (benefit) is different from the amount which would be provided by applying the statutory federal income tax rate to the Company's pretax income (loss). The reasons for the difference are as follows (in thousands):

	<u>1989</u>	<u>%</u>	<u>1988</u>	<u>%</u>	<u>1987</u>	<u>%</u>
Computed "statutory" provision (benefit)	\$(8,794)	(34)%	\$ 4,587	34%	\$ 5,077	40%
Revision of prior years' estimated taxes	(209)	(1)	(6,075)	(45)		
Effect of capital losses not currently deductible	1,580	7				
Effect of adjustments associated with the alternative minimum tax	4,089	16	(1,094)	(8)	(2,254)	(18)
Effect of capital loss carryback	(216)	(1)				
Investment tax credits			(841)	(6)	(688)	(5)
State income taxes, net of federal tax benefit	<u>81</u>	<u>—</u>	<u>312</u>	<u>2</u>	<u>222</u>	<u>2</u>
Income tax provision (benefit)	<u>\$(3,469)</u>	<u>(13)%</u>	<u>\$(3,111)</u>	<u>(23)%</u>	<u>\$ 2,357</u>	<u>19%</u>

At December 31, 1989, the Company has tax basis net operating loss carryovers available to offset future regular taxable income, and investment and business tax credit carryovers available to offset future regular or alternative federal income taxes payable. These carryovers expire as follows (in thousands):

	<u>Net Operating Losses</u>	<u>Investment and Business Tax Credits</u>
1995	\$ 6,430	
1997	6,126	
1999		\$ 78
2000	15,591	178
2001	18,225	286
2004	<u>10,478</u>	<u>—</u>
	<u>\$ 56,850</u>	<u>\$ 542</u>

All of the Company's net operating loss carryovers are attributed to preference-related items, and therefore are not available to offset alternative minimum taxable income. However, they are available to offset future regular taxable income. Due to the availability of these net operating losses for regular corporate income tax purposes, deferred taxes have been provided based on alternative minimum taxable income. At December 31, 1989, the Company has an alternative minimum tax credit of approximately \$3,600,000 available to offset future regular income taxes payable to the extent such regular taxes exceed alternative minimum taxes payable. The Company has approximately \$3,100,000 of capital loss carryovers expiring in 1994 available to offset future capital gains.



For financial statement purposes, the Company has unused regular corporate tax net operating loss carryovers of approximately \$46,000,000, and no investment tax credit carryovers.

Note 6: Long-Term Debt and Credit Agreement

Long-Term Debt

During 1989, the Company issued subordinated zero coupon convertible notes, due June 14, 2004, with a face value at maturity of \$201,250,000. The notes were issued at 30.832% of their face value at maturity which results in an 8% yield compounded semiannually to maturity. These notes are carried net of original issue discount, which is being amortized by the interest method over the life of the issue. At December 31, 1989, the outstanding balance, including accrued original issue discount, was \$64,760,000. The noteholder, at his option, may convert each note with a face value of \$1,000 into 20.824 shares of the Company's common stock. The notes are not redeemable by the Company prior to June 14, 1991, unless the closing sale price of the Company's common stock equals or exceeds \$22.21 per share (as adjusted upon certain events) for at least 20 trading days within 30 consecutive trading days ending not more than 5 trading days prior to notice of redemption. Subject to the foregoing, the notes are redeemable in cash at any time at the option of the Company, in whole or in part, at redemption prices equal to the issue price plus accrued original issue discount to the date of redemption. The Company will purchase any note with a face value of \$1,000 at the option of the holder on June 14, 1994 at a purchase price of \$456.39 (issue price plus accrued original issue discount to such date). The Company, at its option, may pay such purchase price in cash, shares of common stock or extension notes, but not in any combination thereof. Deferred debt issuance expenses of approximately \$2,200,000 were incurred in connection with the issuance of this debt and are being amortized using the interest method over the life of the issue.

Credit Agreement

The Company has an unsecured, revolving credit and term loan agreement with five banks which enables the Company to borrow up to \$75,000,000. The agreement provides for revolving credit advances of up to \$25,000,000 for a period of up to seven years and revolving credits on the next \$50,000,000 through June 30, 1991, which can then be converted into four-year term loans payable in equal quarterly installments. Commitment fees during the revolving periods are  $\frac{3}{8}$  of 1 percent on the average daily unused portion of the first \$50,000,000 of available credit and  $\frac{1}{4}$  of 1 percent of the next \$25,000,000 of available credit. The interest rates on the revolving credits are: on the first \$25,000,000 of revolving credit advances, the agent bank's Reference Rate with options to borrow at the Offshore Rate plus  $\frac{1}{2}$  percent or a CD Rate plus  $\frac{5}{8}$  percent; on the second \$25,000,000, at the Offshore Rate plus  $\frac{3}{4}$  percent or the CD Rate plus  $\frac{7}{8}$  percent; and, for the third \$25,000,000, at the Offshore Rate plus  $1\frac{1}{2}$  percent or the CD Rate plus  $1\frac{5}{8}$  percent. No compensating balances are required. The interest rates upon conversion of advances to term loans increase by  $\frac{1}{4}$  of 1 percent on the second \$25,000,000 and by 1 percent on the third \$25,000,000. The credit agreement contains certain restrictive covenants concerning the maintenance of minimum net worth and certain financial ratios. There were no outstanding borrowings under the agreement as of December 31, 1989.



Note 7: Contingencies

Various legal actions and claims are pending against the Company and certain of its subsidiaries. The Company has been notified by the U.S. Environmental Protection Agency (EPA) that it has been designated by the EPA as a potentially responsible party with respect to a superfund priority list site located in the State of Colorado and a second site located in the State of Washington. In October 1989, the Company was notified by the EPA that it was also identified by the EPA as a potentially responsible party at the Bunker Hill superfund site located in northern Idaho. The Company has been named as a third party defendant in two separate lawsuits originally brought by the State of Colorado to recover natural resource damages and response costs under the Comprehensive Environmental Response, Compensation and Liability ACT (CERCLA) at two Colorado mining sites. The Company is also named as one of a number of defendants in a suit brought under CERCLA by the United States Government to recover response costs at one of the sites subject to the State of Colorado litigation. Although the ultimate disposition of these actions is not presently determinable, it is the opinion of the Company's management, based upon the information available at this time, that the outcome of the suits and proceedings mentioned, and other miscellaneous litigation and proceedings now pending, will not have a material adverse effect on the financial condition of the Company and its consolidated subsidiaries.

On March 29, 1989, the Company negotiated a settlement of the lawsuit brought by private party plaintiffs claiming damages resulting from operations conducted by the Company's predecessor in interest, Ranchers Exploration and Development Corporation, at an Arizona mine site. As part of the settlement, the Company paid \$1.6 million to reimburse the plaintiffs for a substantial portion of their costs to construct the current mine water treatment facility located at the mine site, and a substantial portion of the plaintiffs' legal fees and costs incurred in the litigation.

Note 8: Employee Benefit Plans

The Company and its wholly owned subsidiaries have pension plans covering substantially all employees. One plan covering eligible salaried and hourly employees provides retirement benefits and is based on the employee's compensation during the highest 36 months of the last 120 months before retirement. Two other pension plans covering eligible hourly employees provide benefits of stated amounts for each year of service. It is the Company's policy to make contributions to these plans sufficient to meet the minimum funding requirements of applicable laws and regulations, plus such additional amounts, if any, as the Company and its actuarial consultants consider appropriate. Contributions are intended to provide not only for benefits attributed to service to date, but also for those expected to be earned in the future. Plan assets for these plans consist principally of equity securities, insurance contracts and corporate and U.S. government obligations.



Net periodic pension cost (credit) for the plans consisted of the following in 1989, 1988 and 1987 (in thousands):

	1989	1988	1987
Service cost	\$ 624	\$ 575	\$ 579
Interest cost	1,657	1,662	1,602
Return on plan assets	(2,029)	(1,838)	(1,950)
Amortization of transition asset	<u>(428)</u>	<u>(428)</u>	<u>(440)</u>
Net pension credit	<u>\$ (176)</u>	<u>\$ (29)</u>	<u>\$ (209)</u>

The following table sets forth the funded status (in thousands) of the plans and amounts recognized in the Company's consolidated balance sheets at December 31, 1989 and 1988:

	1989	1988
Actuarial present value of benefit obligation:		
Vested benefits	\$ 18,295	\$ 15,612
Nonvested benefits	<u>231</u>	<u>1,020</u>
Accumulated benefit obligation	18,526	16,632
Effect of projected future salary and wage increases	<u>3,707</u>	<u>3,964</u>
Projected benefit obligation	<u>\$ 22,233</u>	<u>\$ 20,596</u>
Plan assets in excess of projected benefit obligation	\$ 6,173	\$ 5,902
Unrecognized net (gain)	(1,839)	(1,043)
Unrecognized prior service cost	266	20
Unrecognized net asset at January 1	<u>(5,262)</u>	<u>(5,690)</u>
Pension liability recognized in consolidated balance sheet	<u>\$ 662</u>	<u>\$ 811</u>

The projected benefit obligation was calculated applying assumed discount rates of 8.0% in 1989 and 8.5% in 1988 and an assumed long-term compensation increase rate of 6.0% for 1989 and 1988. The assumed long-term rate of return on plan assets utilized in 1989 was 8.5% and in 1988 was 8.0%.

In August 1988, the Company offered a special early retirement option to participants in the Hecla retirement plan with no actuarial reduction in their accrued benefit for early retirement. The special early retirement program is being funded out of general corporate funds until the participant reaches normal retirement age or age 60 with 30 years of service, at which time payments will be made by the related pension trust. Approximately \$221,000 was accrued in September 1988 as the estimated liability for those eligible employees who elected to participate in the program.



In addition to providing pension benefits, the Company provides certain life insurance, medicaid and medicare supplemental benefits. Substantially all of the Company's employees may become eligible for the life insurance benefits if they reach normal retirement age while working for the Company. The medicaid and medicare supplement benefits apply only to those employees who retired prior to October 1, 1982. The cost of these life insurance and health care benefits is recognized as an expense when payments are made and totalled approximately \$119,000, \$172,000 and \$256,000 in 1989, 1988 and 1987 respectively.

The Company has a Deferred Compensation Plan which permits eligible officers and directors to defer a portion of their compensation. The deferred compensation, which together with Company matching amounts and accumulated interest is accrued but unfunded, is distributable in cash after retirement or termination, and at December 31, 1989 and 1988, amounted to approximately \$1,156,000 and \$981,000, respectively. The Company has insured the lives of certain officers, who participate in the deferred compensation program, to assist in the funding of the deferred compensation liability. The Company is the owner and beneficiary of the insurance policies.

The Company has a salaried employees' Capital Accumulation Plan which is available to all salaried employees after completion of one year of service. Employees may contribute from 2% to 10% of their compensation to the Plan. The Company makes a matching contribution of 25% of an employee's contribution up to, but not exceeding, 5% of the employee's earnings. The Company's contributions for 1989, 1988 and 1987 were approximately \$81,000, \$73,000 and \$68,000, respectively.

Note 9: Shareholders' Equity

Shareholder Rights Plan

In 1986, the Company adopted a Shareholder Rights Plan. Pursuant to this plan, holders of common stock received one preferred share purchase right for each common share held. The rights would become exercisable ten days after an individual or group acquired 20% of the Company's outstanding common shares or commenced or announced an intention to commence a tender or exchange offer that could result in the acquisition of 30% of the common shares. When exercisable, the right would, subject to certain adjustments and alternatives, entitle rightholders, other than the acquiring person or group, to purchase common stock of the Company or the acquiring company having a market value of twice the \$47.50 exercise price of the right. The rights are nonvoting, may be redeemed at any time at a price of 5¢ per right prior to the tenth day after an individual or group acquires 20% of the Company's common stock, and expire in 1996. Additional details are set forth in the Rights Agreement filed with the Securities and Exchange Commission on May 19, 1986.

Stock Option Plans

The Company has two stock option plans which were adopted in 1982 and 1987. The 1982 plan permits options to qualify as "Incentive Stock Options" under the Internal Revenue Code. Under the 1982 plan, options have been granted to certain officers and employees to purchase common stock at a



price not less than the fair market value at the date of grant. All of the outstanding incentive stock options were granted in tandem with a corresponding number of stock appreciation rights. These rights entitle the recipient to payment for the increase in the market value of the stock above the option price, at the date of exercise. Half of this payment is made in cash and half in the form of newly issued common stock. The exercise of either rights or options serves to cancel the other. Options under the 1982 plan are immediately exercisable for periods of up to three years. Under the 1982 plan, 113,492 shares are available for grant in the future.

The 1987 plan, a nonstatutory plan, provides that options may be granted to certain officers and employees to purchase common stock at a price of not less than 50% of the fair market value at the date of grant. The 1987 plan also provides that options may be granted with a corresponding number of stock appreciation rights and/or tax offset bonuses to assist the optionee in paying the income tax liability that may exist upon exercise of the options. All of the outstanding stock options under the 1987 plan were granted with an associated tax offset bonus with the exception of one grant for 7,500 shares which was granted in tandem with a corresponding number of stock appreciation rights and tax offset bonuses. Outstanding options under the 1987 plan are immediately exercisable for periods up to ten years. Under the 1987 plan, 292,500 shares are available for grant in the future.

The aggregate amounts charged (credited) to income in connection with the plans were \$201,000, \$(67,000), and \$1,177,000 in 1989, 1988 and 1987, respectively.

Transactions concerning stock options are summarized as follows:

	Incentive Stock Option Plan		Nonstatutory Stock Option Plan		Total Shares
	Shares	Price	Shares	Price	
Outstanding, December 31, 1986	120,550	\$10.12-16.50	-0-		120,550
Year ended December 31, 1987:					
Granted	41,100	12.75	107,500	\$10.37	148,600
Exercised	<u>(136,728)</u>	10.12-16.50	<u>-0-</u>		<u>(136,728)</u>
Outstanding, December 31, 1987	24,922	10.12-13.75	107,500	10.37	132,422
Year ended December 31, 1988:					
Exercised	<u>(500)</u>	12.75	<u>(3,923)</u>	10.37	<u>(4,423)</u>
Outstanding, December 31, 1988	24,422	10.12-13.75	103,577	10.37	127,999
Year ended December 31, 1989:					
Granted	-0-	-0-	100,000	12.25	100,000
Exercised	(21,400)	10.12-12.75	-0-	-0-	(21,400)
Expired	<u>(1,522)</u>	11.75-13.75	<u>-0-</u>	-0-	<u>(1,522)</u>
Outstanding, December 31, 1989	<u>1,500</u>	<u>\$12.75</u>	<u>203,577</u>	<u>\$10.37-12.25</u>	<u>205,077</u>



Note 10: Business Segments (in thousands)

	<u>1989</u>	<u>1988</u>	<u>1987</u>
Net sales to unaffiliated customers:			
Metals	\$ 66,035	\$ 77,768	\$ 64,774
Industrial minerals	<u>33,356</u>	<u>24,535</u>	<u>22,372</u>
	\$ 99,391	\$ 102,303	\$ 87,146
	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>
Gross profit:			
Metals	\$ 3,427	\$ 25,747	\$ 23,824
Industrial minerals	<u>3,643</u>	<u>4,079</u>	<u>3,353</u>
	\$ 7,070	\$ 29,826	\$ 27,177
	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>
Capital expenditures:			
Metals	\$ 26,123	\$ 23,157	\$ 30,574
Industrial minerals	13,319	2,599	1,556
General corporate assets	<u>1,160</u>	<u>194</u>	<u>195</u>
	\$ 40,602	\$ 25,950	\$ 32,325
	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>
Depreciation, depletion and amortization:			
Metals	\$ 13,665	\$ 8,552	\$ 6,940
Industrial minerals	3,865	2,959	3,270
General corporate assets	<u>497</u>	<u>435</u>	<u>677</u>
	\$ 18,027	\$ 11,946	\$ 10,887
	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>
Identifiable assets:			
Active metals facilities	\$132,048	\$118,409	\$ 90,723
Industrial minerals business	40,217	26,912	28,623
General corporate assets	43,753	35,777	43,241
Idle and standby metal facilities	<u>6,180</u>	<u>7,754</u>	<u>8,129</u>
	\$222,198	\$188,852	\$170,716
	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>

Operating costs and identifiable assets of each segment are those that are directly identified with those operations. General corporate assets consist primarily of cash, receivables, investments and corporate property, plant and equipment.

Note 11: Selected Quarterly Data (Unaudited)  
(in thousands except for per-share amounts)

	1989				Total
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
Sales of products	\$ 24,171	\$ 25,377	\$ 25,287	\$ 24,556	\$ 99,391
Gross profit (loss)	\$ 3,783	\$ 1,776	\$ 1,675	\$ (164)	\$ 7,070
Net (loss)	\$ (2,539)	\$ (3,181)	\$ (3,457)	\$ (13,218)	\$ (22,395)
Net (loss) per share	\$(0.09)	\$(0.12)	\$(0.13)	\$(0.49)	\$(0.83)
	1988				Total
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
Sales of products	\$ 21,756	\$ 26,228	\$ 28,101	\$ 26,218	\$102,303
Gross profit	\$ 4,607	\$ 7,840	\$ 8,022	\$ 9,357	\$ 29,826
Income before cumulative effect of change in accounting principle	\$ 6,420	\$ 3,019	\$ 3,370	\$ 3,793	\$ 16,602
Cumulative effect of change in accounting for income taxes	(1,473)	- -	- -	- -	(1,473)
Net income	\$ 4,947	\$ 3,019	\$ 3,370	\$ 3,793	\$ 15,129
Net income per share:					
Income before cumulative effect of change in accounting principle	\$ 0.23	\$ 0.12	\$ 0.12	\$ 0.14	\$ 0.61
Cumulative effect of change in accounting for income taxes	(0.05)	- -	- -	- -	(0.05)
	\$ 0.18	\$ 0.12	\$ 0.12	\$ 0.14	\$ 0.56



**INDEPENDENT AUDITOR'S REPORT ON  
FINANCIAL STATEMENT SCHEDULES**

The Board of Directors  
and Shareholders  
Hecla Mining Company

Our report on the consolidated financial statements of Hecla Mining Company and wholly-owned subsidiaries is included in this Form 10-K and covers the financial statements listed under Item 14(a)(1) of this Form 10-K. In connection with our audits of such financial statements, we have also audited the related financial statement schedules listed under Item 14(a)(2) of this Form 10-K.

In our opinion, the financial statement schedules referred to above, when considered in relation to the basic financial statements taken as a whole, present fairly the information required to be included therein.

COOPERS & LYBRAND



Spokane, Washington  
February 2, 1990

## HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

MARKETABLE SECURITIES - OTHER INVESTMENTS - December 31, 1989  
(dollars in thousands)

Column A		Column B	Column C	Column D	Column E
Issuer		Number of Shares	Cost of Issue	Market Value of Issue	Amount at Which Issue is Carried on Balance Sheet
Sunshine Mining Company	Common Stock	748,100	\$ 2,431	\$ 2,431	\$ 2,431
Other Marketable Securities	Common Stock	718,098	1,181	546	546
Granduc Mines Limited	Common Stock	2,815,330	3,392	6,672	3,392
Other Stock Ownership in Inactive Companies	Common and Preferred Stocks	16,354,960	4,434	Note (1)	4,434
Other Investments	Mining Properties and cash surrender value of life insurance	- -	1,897	- -	1,897
		20,636,488	\$13,335	\$ 9,649	\$ 12,700

Note (1) The stock of the inactive companies may be restricted as to trading or may have limited marketability. Although some of the shares are frequently traded on the over-the-counter market in Spokane, Washington, it is uncertain whether or not quoted market prices could be realized upon sale of the securities.

See Note 3 of Notes to Consolidated Financial Statements.



## HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

PROPERTY; PLANT AND EQUIPMENT - For the Years Ended December 31-1989, 1988 and 1987  
(dollars in thousands)

Column A	Column B	Column C	Column D	Column E	Column F
Description	Balance at Beginning of Period	Additions at Cost (1)	Retirements	Other Change Add (Deduct)(2)	Balance at End of Period
Year ended December 31-1989:					
Mining properties	\$ 28,296	\$ 2,243	\$ - -	\$ (324)	\$ 30,215
Deferred development costs	54,764	862	377	11,876	67,125
Plants and equipment	136,882	37,235	1,731	(13,145)	159,241
Land	5,475	262	- -	(287)	5,450
	<u>\$ 225,417</u>	<u>\$ 40,602<sup>(3)</sup></u>	<u>\$ 2,108</u>	<u>\$ (1,880)<sup>(4)</sup></u>	<u>\$ 262,031</u>
Year ended December 31-1988:					
Mining properties	\$ 28,189	\$ 107	\$ - -	\$ - -	\$ 28,296
Deferred development costs	55,113	351	103	(597)	54,764
Plants and equipment	111,933	25,433	1,081	597	136,882
Land	5,872	59	456	- -	5,475
	<u>\$ 201,107</u>	<u>\$ 25,950<sup>(5)</sup></u>	<u>\$ 1,640</u>	<u>\$ - -</u>	<u>\$ 225,417</u>
Year ended December 31-1987:					
Mining properties	\$ 10,213	\$ 18,451	\$ 475	\$ - -	\$ 28,189
Deferred development costs	52,436	4,120	3,672	2,229	55,113
Plants and equipment	112,364	9,914	8,116	(2,229)	111,933
Land	6,065	- -	193	- -	5,872
	<u>\$ 181,078</u>	<u>\$ 32,485<sup>(5)</sup></u>	<u>\$ 12,456<sup>(6)</sup></u>	<u>\$ - -</u>	<u>\$ 201,107</u>

## Notes:

- (1) See Note 1 of Notes to Consolidated Financial Statements for a description of the Company's depreciation, depletion and amortization policies.
- (2) Reclassifications primarily to other asset accounts and transfers between plants and equipment and deferred development costs.
- (3) See "Management's Discussion and Analysis" for major capital expenditures.
- (4) Represents the write-down of the Company's interest in several mining properties. See Note 4 of Notes to Consolidated Financial Statements for discussion.
- (5) Principally the acquisition of a 28% interest in the Greens Creek Joint Venture.
- (6) Principally the sale of the Tungsten Queen mine, Leadville mine, Revenue-Virginus mine and the Albuquerque, New Mexico office building.

## HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

## ACCUMULATED DEPRECIATION, DEPLETION and AMORTIZATION OF PROPERTY, PLANT AND EQUIPMENT

For the Years Ended December 31-1989, 1988 and 1987  
(dollars in thousands)

Column A	Column B	Column C	Column D	Column E	Column F
Description	Balance at Beginning of Period	Additions at Cost	Retirements	Other Change Add (Deduct)	Balance at End of Period
Year ended December 31-1989:					
Mining properties	\$ 4,141	\$ 1,801	\$ - -	\$ - -	\$ 5,942
Deferred development costs	19,879	4,427	- -	- -	24,306
Plants and equipment	65,690	11,675	1,441	- -	75,924
	<u>\$ 89,710</u>	<u>\$ 17,903</u>	<u>\$ 1,441</u>	<u>\$ - -</u>	<u>\$ 106,172</u>
Year ended December 31-1988:					
Mining properties	\$ 3,620	\$ 521	\$ - -	\$ - -	\$ 4,141
Deferred development costs	17,029	2,850	- -	- -	19,879
Plants and equipment	57,966	8,556	832	- -	65,690
	<u>\$ 78,615</u>	<u>\$ 11,927</u>	<u>\$ 832</u>	<u>\$ - -</u>	<u>\$ 89,710</u>
Year ended December 31-1987:					
Mining properties	\$ 3,401	\$ 586	\$ 471	\$ 104	\$ 3,620
Deferred development costs	18,644	1,682	3,596	299	17,029
Plants and equipment	56,811	8,600	7,208	(237)	57,966
	<u>\$ 78,856</u>	<u>\$ 10,868</u>	<u>\$ 11,275<sup>(1)</sup></u>	<u>\$ 166<sup>(2)</sup></u>	<u>\$ 78,615</u>

## Notes:

- (1) Principally the sale of the Tungsten Queen mine, Leadville mine, Revenue-Virginus mine and the Albuquerque, New Mexico office building.
- (2) Represents accumulated depreciation from the Greens Creek Joint Venture acquisition totalling \$166,000.



SCHEDULE X

HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

SUPPLEMENTARY INCOME STATEMENT INFORMATION

For the Years Ended December 31-1989, 1988 and 1987  
(dollars in thousands)

Column A	Column B
Item Note (2)	Charged to Costs and Expenses
Year ended December 31-1989:	
1. Maintenance and repairs	Note (1)
3. Taxes, other than payroll and income taxes (principally property taxes)	\$ 2,701
4. Royalties paid	\$ 353
Year ended December 31-1988:	
1. Maintenance and repairs	Note (1)
3. Taxes, other than payroll and income taxes (principally property taxes)	\$ 2,336
4. Royalties paid	\$ 1,153
Year ended December 31-1987:	
1. Maintenance and repairs	Note (1)
3. Taxes, other than payroll and income taxes (principally property taxes)	\$ 2,987
4. Royalties paid	\$ 1,338

Notes:

- (1) The accounts of the Company do not segregate the amounts of maintenance and repairs, and it is not practicable to obtain the information.
- (2) Items of information not provided were less than 1% of total sales and revenues.

This page is a reference page used to track documents internally for the Division of Oil, Gas and Mining

Mine Permit Number MD210054 Mine Name Escalante Silver  
Operator Hedra mining co Date 12-31-1989  
TO \_\_\_\_\_ FROM \_\_\_\_\_

☐ CONFIDENTIAL ☐ BOND CLOSURE ☐ LARGE MAPS ☒ EXPANDABLE  
☐ MULTIPUL DOCUMENT TRACKING SHEET ☐ NEW APPROVED NOI  
☐ AMENDMENT ☐ OTHER \_\_\_\_\_

Description

YEAR-Record Number

☐ NOI ☒ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

Securities and Exchange Commission

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ TEXT/ 81/2 X 11 MAP PAGES ☐ 11 X 17 MAPS ☐ LARGE MAP

COMMENTS: \_\_\_\_\_

CC: \_\_\_\_\_